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O N

S W I N E I M P R O V E M E N T

I

During the Period

1897 - 1949

Compiled by

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FOREWARD

An attempt has been made to assemble a reasonably complete list of publications on swine improvement in one readily accessible source. No claim of completeness or great accuracy is made. Basically, it includes potential items for incorporation in our library. Most of the papers have some bearing on swine breeding plans. No attempt was made to include articles in other languages unless an English summary was given. Many publications listed can no longer be obtained. One goal of this effort was to document early studies often inaccessible to or overlooked by research workers of this day and time.

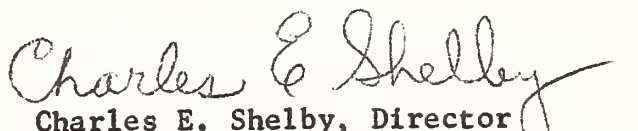
The present version represents the fourth draft of what started to be a bibliography of publications on swine breeding from the Regional Swine Breeding Laboratory. Favorable comments on the third edition encouraged additional effort on this project. This edition has been edited more carefully than earlier ones, but is still lacking in this respect. Its size has grown until it seems desirable to issue it in parts. A smaller size is more convenient to use and can be revised more easily.

The Bibliography was compiled from reprints available in this office, library search, citations from articles listed here, the Bibliography of Agriculture, Animal Breeding Abstracts, and Index of Current Research in Pigs.

In many instances, research conducted in related areas such as meats, production, nutrition, physiology, and zoology have been included. Thus a change in wording of the title from "Swine Breeding" to "Swine Improvement" seemed warranted. The items on reproductive physiology and meats have been greatly expanded over previous editions. Some of these citations will be deleted in the next edition. Biochemical studies on meats were not generally listed. With the exception of sex hormones, the effect of feed additives on growth and reproduction were excluded.

Popular articles on swine improvement from other countries were not usually included. In contrast, popular articles from Swine Geneticists in The Regional Swine Breeding Laboratory were listed. The material on swine A.I. was culled little. Annual reports of pig testing were omitted unless a summary of several years' work was included.

This edition of the Bibliography will be distributed to project leaders and to research workers in Animal Breeding. Omissions and corrections should be pointed out. Supplements may be issued. With the availability of the Bibliography of Reproduction, coverage of this area seems unnecessary in future editions.


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-1-

1863

Struthers, J. 1863. On the solid-hoofed pig; and on a case in which the fore foot of the horse presented two toes. Edinburgh New Phil. J. 17:273-280.

1869

Cameron, Charles, A. 1869. Composition of the milk of the sow. Chemical News 19:217.

1878

Coves, E. 1878. On a breed of solid hoofed pigs apparently established in Texas. B. U. S. Geol. and Geod. Survey 4:295-298.

1889

Auld, R. C. 1889. Some cases of solid-hoofed hogs and two-toed horses. Amer. Nat. 23:447-449.

1891

Minot, C. S. 1891. Senescence and rejuvenation. J. Physiol. 12: 103-108.

1894

Bateson, W. 1894. Material for the Study of Variation Treated with Especial Regard to Discontinuity in the Origin of Species. Macmillan and Co. London.

1897

Henry, W. A., and Wall, F. W. 1897. On the yield and composition of sows milk. Wis. Agr. Expt. Sta. Rpt. pp. 10-28.

1898

Bitting, A. W. 1898. Fecundity of swine. 10th Annu. Rpt. Ind. Agr. Expt. Sta. pp. 42-46.

1899

Bitting, A. W. 1899. The mammary gland. 12th Annu. Rpt. Ind. Agr. Expt. Sta. pp. 37.

1900

Parker, G. H., and Bullard, C. 1900. The arrangement of the mammary glands in litters of unborn pigs. Sci. (N.S.) 11:168.

1901

Shutt, F. F. 1901. Soft pork: Investigations into its character and causes. Canad. Expt. Farm B. 38.

1903

Carlyle, W. L. 1903. The food requirements of pigs from birth to maturity. Wis. Agr. Expt. Sta. B. 104.

Prentiss, C. W. 1903. Polydactylism in man and the domestic animals with especial reference to digital variation in swine. B. Mus. Comp. Zool. (1902-03) 40:245-314.

1904

Davies, L. R. 1904. Yield and composition of sow's milk. Annu. Rpt. Wis. Agr. Expt. Sta. p. 41 - 47.

Carlyle, W. L. 1904. The food requirement of pigs from birth to maturity. Wis. Agr. Expt. Sta. B. 104.

1905

Gentry, N. W. 1905. Inbreeding Berkshires. Proc. Amer. Breed. Assoc. 1:169-171.

Hays, W. M. 1905. Distributing valuable new varieties and breeds. Rpt. Amer. Breed. Assoc. 1:58-65.

Hays, W. M. 1905. Breeding problems. Rpt. Amer. Breed. Assoc. 1:196-202.

1906

Boss, A. 1906. Testing meat producing animals. Rpt. Amer. Breed. Assoc. 2:53-58.

- Hays, W. M. 1906. American work in breeding plants and animals. Rpt. Amer. Breed. Assoc. 2:155-167.
- Rommel, George M. 1906. The fecundity of Poland China and Duroc Jersey sows. USDA Bur. Anim. Ind. Cir. 95.
- Rommel, G. M., and Phillips, E. F. 1906. Inheritance in the female line of size of litter in Poland China sows. Proc. Amer. Phil. Soc. 45:245-254.
- Spillman, W. J. 1906. Inheritance of coat color in swine. Sci.(N. S.) 24:441-443.
- Melvin, A. D., and Schroeder, E. C. 1906. Animal breeding and disease. USDA, Bur. Anim. Indust., Rpt.:213-222.

1907

- Chambers, J. A. 1907. Crossbreeding hogs for market purposes. B.S. Thesis. Iowa State Col. Libr. Ames.
- Dryden, John. 1907. The evolution of the bacon type. Rpt. Amer. Breed. Assoc. 3:209-211.
- Gaumnitz, D. A. 1907. Report of the committee on swine breeding. Rpt. Amer. Breed. Assoc. 3:285-289.
- Rommel, G. M. 1907. Inheritance of litter size in Poland China sows. Rpt. Amer. Breed. Assoc. 3:201-208.
- Rommel, George M. 1907. Relative proportions of the sexes in litters of pigs. USDA Bur. Anim. Ind. Cir. 112.
- Rommel, G. M., and Phillip, E. F. 1907. Inheritance in female line of size of litter in Poland-China sows. Proc. Amer. Phil. Soc. 45:245-254.
- Simpson, Q. I. 1907. Rejuvenation by hybridization. Rpt. Amer. Breed. Assoc. 3:76-81.
- Simpson, Q. I., and Simpson J. P. 1907. Reversion induced by cross-breeding. Science 25:(N.S.):426-428.
- Spillman, W. J. 1907. Inheritance of the belt in Hampshire swine. Sci. (N.S.)25:541-543.
- Spillman, W. J. 1907. Report of committee on animal hybridizing. Rpt. Amer. Breed. Assoc. 3:184-191.
- Spillman, W. J. 1907. Colour inheritance in mammals. Sci 25(N.S.): 313-314.

1908

- Spillman, W. J. 1908. Color factors in mammals. Rpt. Amer. Breed. Assoc. 4:357-359.
- Simpson, Q. I., and Simpson, J. P. 1908. Genetics in swine hybrids. Sci. (N.S.) 27:941.

1908

- Spillman, W. J. 1908. Report of the committee on animal hybridizing.
Rpt. Amer. Breed. Assoc. 4:317-323.

1909

- Gaumnitz, D. A. 1909. A plan for breeding swine. Report of the
committee on swine breeding. Rpt. Amer. Breed. Assoc. 5:8-12.
- Kingsbury, B. F. 1909. Report of a case of hermaphroditism (H.
versus lateralis) in *Sus scrofa*. Anat. Rec. 3:278-282.
- Simpson, Q. I., and Simpson, J. P. 1909. Genetic laws applied. Rpt.
Amer. Breed. Assoc. 5:250-255.
- Surface, F. M. 1909. Fecundity in swine. Biometrika. 6:433-436.

1910

- Spillman, W. J. 1910. History and peculiarities of the mule-foot hog.
Rpt. Amer. Breed. Assoc. 6:116-120. Amer. Breed. Mag. 1:178-182.
- Spillman, W. J. 1910. Report of committee on animal hybrids. Rpt.
Amer. Breed. Assoc. 6:131-134. Amer. Breed. Mag. 1:193-196.
- Willson, C. A. 1910. Objects and results of swine registration. Rpt.
Amer. Breed. Assoc. 6:341-349.

1911

- Lowrey, L. G. 1911. Prenatal growth of the pig. Amer. J. Anat.
12:107-138.
- Pearson, K. 1911. Remark on Prof. Lloyd's note on the inheritance of
fertility. Biometrika. 8:247.
- Simpson, Q. I. 1911. Fecundity in swine. Rpt. Amer. Breed. Assoc.
7:261-266.
- Simpson, Q. I., and Simpson, J. P. 1911. Analytical hybridizing. Rpt.
Amer. Breed. Assoc. 7:266-275.

1912

- Evvard, J. M. 1912. Nutrition as a factor in fetal development. Rpt. Amer. Breed. Assoc. 8:549-560.
- George, C. R. 1912. The inheritance of fecundity in Poland China swine. M.S. Thesis. U. of Ohio Libr.
- Hammond, J. 1912. A case of hermaphroditism in the pig. J. Anat. (Lond.) 46:307-312.
- Jones, J. McKinley. 1912. Age as a factor in animal breeding. M. A. Thesis. U. of Mo. Libr. Columbia.
- Mackenzie, K. J. J., and Marshall, F. H. A. 1912. On ovariectomy in sows with observations on the mammary glands and the internal genital organs. J. Agr. Sci. 4(4):410-420.
- Wentworth, E. N. 1912. Inheritance of mammae in swine. Rpt. Amer. Breed. Assoc. 8:545-549.
- Wentworth, E. N. 1912. Another sex-limited character. Sci 35 (N.S.): 986.

1913

- Fishbein, M. 1913. Isoagglutination in man and lower animals. J. Infect. Diseases. 12:133-139.
- Frohlich, G. 1913. Heredity studies with swine. J. Landv. 61(3):217-235.
- Mackenzie, K. J. J., and Marshall, F. H. A. 1913. An ovariectomy in sows; with observations on the mammary glands and internal genital organs. (Part II). J. Agr. Sci. 5(4):418-423.
- Parker, G. H., and Bullard, C. 1913. On the size of litters and the number of nipples in swine. Proc. Amer. Acad. Arts and Sci. 49: 399-426.
- Pearl, R. 1913. Note regarding the relation of age to fecundity. Sci. (N.S.) 37:226-228.
- Pearl, R. 1913. On the correlation between the number of mammae of the demand size of litter in mammals. II. Interracial correlations in swine. Proc. Soc. Expt. Biol. Med. 11:31-32.
- Smith, W. W. 1913. Color inheritance in swine. Amer. Breed. Mag. 4(2):113-123.
- Wentworth, E. N. 1913. Inheritance of mammae in Duroc-Jersey swine. Amer. Nat. 47:257-278.
- Woodsdalek, J. E. 1913. Spermatogenesis of the pig with special reference to the accessory chromosomes. Biol. B. 25:8-44.
- Woodsdalek, J. E. 1913. Accessory chromosomes in the pig. Sci 38(N.S.):30-31.

1914

- Frohlich, Gustav. 1914. Color inheritance in pigs. J. Hered. 5:92.
- Hammond, J. 1914. On some factors controlling fertility in domestic animals. J. Agr. Sci. 6:263-277.
- Hobday, F. T. G. 1914. Castration and ovariectomy. 2nd Ed. 162 pp. W & A. K. Johnston Ltd, Edinburgh & London.
- Mackenzie, K. J. J., Marshall, F. H. A., and Hammond, J. 1914. On ovariectomy in sows; with observations on the mammary glands and the internal genital organs. (Part III). J. Agr. Sci. 6(2):182-186.
- McLean, J. A. 1914. The sapphire hog. J. Hered. 5:301-304.
- Parker, G. H. 1914. A note on sex determination. Sci. 39(N.S.):215-216.
- Simpson, Q. I. 1914. Coat pattern in mammals. J. Hered. 5:328-339.
- Smith, W. W. 1914. Increasing size of litters. Pol. China J. 1:15.
- Wentworth, E. N. 1914. Sex-linked factors in the inheritance of rudimentary mammae in swine. Iowa Acad. Sci. 21:265-268.

1915

- Corner, George W. 1915. The corpus luteum of pregnancy, as it is in swine. Carnegie Inst. (Wash.) Contrib. to Embryol. Pub. 222. 2(5).
- Griswald, D. J. 1915. A study of the effects of the periods of gestation and lactation upon the growth and composition of swine. M.A. Thesis. U. of Mo. Libr. Columbia.
- Hopkins, R. M. 1915. Color and pattern inheritance in swine with special reference to the Hampshire. B.S. Thesis. Iowa State Col. Libr. Ames.
- Mackenzie, K. J. J., and Marshall, F. H. A. 1915. On ovariectomy in sows; with observations on the mammary glands and the internal genital organs. (Part IV). J. Agr. Sci. 7(2):243-245.
- Mackenzie, K. J. J., and Marshall, F. H. A. 1915. Physiology and bacon-curing. J. Roy. Soc. Eng. 76:1-13.
- Yerkes, R. M., and Coburn, C. A. 1915. A study of the behavior of the pig by the multiple choice method. J. Anim. Behavior 5:185-225.

1916

- Anon. 1916. Inheritance investigation in swine. Kansas Agr. Expt. Sta. Rpt. 1915-16:19.
- Anon. 1916. Inheritance of fertility in swine. J. Hered. 7:224.
- Harris, J. Arthur. 1916. Statistical studies of the number of nipples in the mammals. Amer. Nat. 50:699-704.
- Harris, J. A. 1916. Variation, correlation, and inheritance of fertility in the mammals. Amer. Nat. 50:626-636.

1916

- Jones, C. A. 1916. The effect of early pregnancy and lactation on the growth of young breeding animals. M.A. Thesis. U. of Mo. Libr. Columbia. Farm
- Moore, P. H. 1916. Breeding work with swine. Canad. Expt./Rpt. 1:588-590.
- Morkeberg, P. A. 1916. The present position and future prospects of swinebreeding in Denmark. Dept. Agr. and Tech. Instr. Ire. J. 17(1):46-47.
- Wentworth, E. N. 1916. Large-type swine and fertility. Breeders' Gaz. 69:722-723.
- Wentworth, Edward N., and Aubel, C. E. 1916. Inheritance of fertility in swine. J. Agr. Res. 5(25):1145-1160.
- Wentworth, E. N. 1916. Long-bodied brood sows. Breeder's Gaz. 70:470-471.
- Wentworth, E. N. 1916. Type and fertility in swine. Country Gentleman 81:1612.

1917

Carey, Eben. 1917. The anatomy of a double pig, syncephalus thoracopagus, with especial consideration of the genetic significance of the circulatory apparatus. Anat. Rec. 12:177-191.

- Hance, R. T. 1917. The diploid chromosome complex of the pig. (Sus scrofa) and their variations. J. Morph. 30:155-222.
- Hayward, H. 1917. Inbreeding experiments with pigs. Del. Agr. Expt. Sta. Rpt.:17.
- Palmer, C. C. 1917. Morphology of normal pigs' blood. J. Agr. Res. 9(5):131-140.

Palmer, C. C. 1917. Effects of muscular exercise and the heat of the sun on the blood and body temperature of normal pigs. J. Agr. Res. 9(6):167-182.

- Palmer, C. C. 1917. Partial thyroidectomy in pigs. Amer. J. Physiol. 42:572-581.
- Severson, B. O. 1917. Color inheritance in swine. J. Hered. 8:379-381.

- Wentworth, E. N. 1917. The influence of the male on litter size. Proc. Iowa Acad. Sci. 24:305-308.
- Welch, H. 1917. The cause and prevention of hairless pigs in the United States. Mont. Agr. Expt. Sta. Cir. 71:34-47.
- Welch, H. 1917. Hairlessness and goiter in newborn domestic animals. Mont. Agr. Expt. Sta. B. 119:81-104.
- Wright, Sewall. 1917. Color inheritance in mammals. J. Hered. 8:426-430.

1918

- Anon. 1918. Inheritance investigations in swine. Kans. Agr. Expt. Sta. Rpt. 1917-18:42-43.
- Anon. 1918. Different types of swine respond differently to feed. Iowa Agr. Expt. Sta. Rpt.:20-21.
- Chung, Pau Sien. 1918. Milk supply for pigs with special reference to the quality and quantity produced by sows. M.S. Thesis. U. of Ill. Libr. Urbana.

1918

- Ewing, P. V., Wright, L. H., and Burk, L. B. 1918. Cooperative soft pork studies. IV. Method of extracting fat samples from live hogs. Texas Agr. Expt. Sta. B. 226.
- Hance, R. T. 1918. Variations in somatic chromosomes. Biol. B. 35:33-37.
- Jones, D. F. 1918. The effects of inbreeding and crossbreeding upon development. Conn. Agr. Expt. Sta. B. 207.
- Pearl, R. 1918. The seasonal distribution of swine breeding. Science Month. 7:244-251.
- Wright, Sewall. 1918. Color inheritance in mammals. VIII. Swine. J. Hered. 9(1):33-38.
- Zimmerman, B. C. 1918. Age as a factor in animal breeding. M.A. Thesis. U. of Mo. Libr. Columbia.

1919

- Folin, O., Denis, W., and Minot, A. S. 1919. Lactose, fat, and protein in milk of various animals. J. Biol. Chem. 37:352.
- Hays, F. A. 1919. Inbreeding animals. I. Experimental evidence. II. Experimental results. Del. Agr. Expt. Sta. B. 123.
- Lloyd-Jones, Orren and Evvard, John M. 1919. Studies on color in swine. Iowa State Col. Res. B. 53.
- Miller, P. E. 1919. Hairless pigs. Minn. Agr. Expt. Sta., Morris Substa. Rpt.:45-46.
- Murphey, H. S. 1919. A method of operating scrotal hernia in boar pigs to save the testicle. J. Amer. Vet. Med. Assoc. 55(N.S.) 8:62.
- Robison, W. L. 1919. Effect of age of pigs on the rate and economy of gains. Ohio Agr. Expt. Sta. B. 335.

1920

- Anon. 1920. The story of the blue hog (Sapphire swine). The Blue Hog Breeding Co., Wilmington, Mass.
- *Ashby, R. C., and Malcomson, A. W. 1920. Variation of individual pigs in economy of gain. J. Agr. Res. 19(5):225-234.
- *Carmichael, W. J., and Rice, John B. 1920. Variations in farrow: with special reference to the birth weight of pigs. Ill. Agr. Expt. Sta. B. 226.
- Longwell, J. H. 1920. The influence of the periods of gestation and lactation upon young swine. M.A. Thesis. U. of Mo. Libr. Columbia.
- ! Corner, G. W. 1920. A case of true lateral hermaphroditism in a pig with functional ovary. Carnegie Inst. Wash. Publ. 274:137-142.

1921

- Berry, R. A., and O'Brien, D. G. 1921. Errors in feeding experiments with cross-bred pigs. J. Agr. Sci. 11:275-286.
- Corner, G. W. 1921. Internal migration of the ovum. Johns Hopkins Hosp. B. 32. pp. 78-83.
- Corner, G. W. 1921. The ovarian cycle of swine. Sci. 53(N.S.). 420-421.
- Corner, G. W. 1921. Cyclic changes in the ovaries and uterus of the sow, and their relation to the mechanism of implantation. Carnegie Inst. (Wash.) Contrib. to Embryol. 64(13):117-146.
- Detlefsen, J. A., and Carmichael, W. J. 1921. Inheritance of syndactylism, black, and dilution in swine. J. Agr. Res. 20:595-604.
- Durham, G. B. 1921. Inheritance of belting spotting in cattle and swine. Amer. Nat. 55:476-477.
- Ellinger, Tage. 1921. The influence of age on fertility in swine. Proc. Natl. Acad. Sci. 7(5):134-138.
- Hammond, J. 1921. Further observations on the factors controlling fertility and foetal atrophy. J. Agr. Sci. 11(4):337-366.
- Lush, Jay L. 1921. Inheritance in swine. J. Hered. 12:57-71.
- Mumford, F. B. 1921. The effect on growth of breeding immature animals. Mo. Agr. Expt. Sta. Res. B. 45.
- > Swanson, C. C. 1921. Effects of rations on the development of the pig.
I. The chemical composition of pigs as influenced by the character of the ration. J. Agr. Res. 21:279-341.
- Spencer, Saunders. 1921. Prolificacy of the brood sow. Farmers Advocate 56:864-865.

1922

- Anderson, W. S. 1922. Sterility in relation to animal breeding. Ky. Agr. Expt. Sta. Res. B. 244.
- Anon. 1922. The question of swine type. Rpt. Iowa Agr. Expt. Sta. (1922):23.
- Anon. 1922. Piney Woods Rooted Type. Chief of the Bur. of Anim. Indus. Rpt. p. 8.
- ^ Bernard, P. M. 1922. The influence of plane of nutrition and continued early breeding upon immature sows. M.A. Thesis. U. of Mo. Libr. Columbia.
- ^ Anon. 1922. Size, sex and weight of pigs per litter. Rpt. Ky. Agr. Expt. Sta. (1922). Pt. 1:46-47.

1922

Carr-Saunders, H. M. 1922. Notes on inheritance in swine. Sci. (N. S.) 55:19,

Hammond, John. 1922. On the relative growth and development of various breeds and crosses of pigs. J. Agr. Sci. 12:387-423.

1923

Anon. 1923. The value of a first cross in the production of pork and bacon. J. Min. Agr. (Gt. Brit.) 29:939-941.

Brody, S., and Ragsdale, A. C. 1923. The equivalence of age in some domestic mammals. Normal Growth of Domestic Mammals. Mo. Agr. Expt. Sta. Res. B. 62:53-58.

Gonzalez, B. M., and Lago, F. P. 1923. Improving Philippine swine. J. Phil. Agr. 12.

Gould, H. N. 1923. Observations on the genital organs of a sex-intergrade hog. Anat. Rec., 26:241-261.

Corner, G. W. 1923. The problem of embryonic pathology in mammals, with observations upon intra-uterine mortality in the pig. Amer. J. Anat. 31(5):523-545.

Crew, F. A. E. 1923. Studies on intersexuality; a peculiar type of developmental intersexuality in the male of domestic mammals. Proc. Royal Soc. 395:90-109.

Crew, F. A. E. 1923. Three cases of developmental intersexuality in the pig. Vet. J. 79:173.

Evvard, J. M., and Culbertson, C. C. 1923. Studies in swine type. Iowa Agr. Exp. Sta. AH D-95, (Swine Breeders Day, Nov. 16, 1923).

Hogan, A. G., and Skourby, C. I. 1923. Determination of the surface area of cattle and swine. J. Agr. Res. 25(10):419-430.

Jackson, F. W. 1923. Soft, oily bacon - its cause and prevention. J. Min. Agr. (Gt. Brit.) 30:261-277.

Lush, J. L. 1923. Cross breeding of swine and the chief results. Breed. Gaz. 83:74.

McKenzie, F. F. 1923. The factor of age in the breeding of swine. M.A. Thesis. U. of Mo. Libr. Columbia.

Miner, E. F. 1923. The prolificacy of spotted Poland China swine. B.S. Thesis. Iowa State Col. Libr. Ames.

Mumford, F. B., Hogan, A. G., and Bernard, P. M. 1923. Growth curves of swine. Normal Growth of Domestic Animals. Mo. Agr. Expt. Sta. Res. B. 62:36-39.

Parkes, A. S. 1923. Studies on the sex-ratio and related phenomena. III. The influence of size of litter. Ann. Appl. Biol. 10:287-292.

1923

- Parkes, A. S. 1923. Studies on the sex ratio and related phenomena. (4). The frequency of sex combinations in pig litters. *Biometrika*. 15(3,4):373-381.
- Stillwell, E. C. 1923. Relationship of hog carcasses and standard pork cuts to the market classes of hogs. M.S. Thesis, Iowa State Col. Libr. Ames.
- Wentworth, Edward N., and Lush, Jay L. 1923. Inheritance in swine. *J. Agr. Res.* 23(7):557-582.

1924

- Anon. 1924. Seek strain of hogs resistant to cholera. *Rpt. Ill. Agr. Expt. Sta.* (1923-24):72.
- Baker, J. R. 1924. Sexual abnormalities in pigs. *Pig Breed. Annu.* 4:112-114.
- Crew, F. A. E. 1924. Hermaphroditism in the pig. *J. Obst. Gynaecol.* 31:369-386.
- Crew, F. A. E. 1924. Genetics and the pig breeder. *Pig Breed. Annu.* 4:40-45.
- Crew, F. A. E. 1924. Blue and white color in swine. *J. Hered.* 15: 395-396.
- Culbertson, C. C. 1924. The costly influence of an inferior sire. *Iowa Agr. Expt. Sta. AH Sect. Leaf.* 101.
- Culbertson, C. C., and Evvard, John M. 1924. Type test studies-- typical litter comparisons. *Iowa Agr. Expt. Sta. AH Sect. Leaf.* 106. (Swine Feeders Day, Nov. 21).
- Davidson, H. R. 1924. Records of production and their use in breeding. *Pig Breed. Annu.* 4:26-30.
- *Ellinger, Tage U., and Evvard, John M. 1924. The register of performance for swine. *Rec. Proc. 16th Annu. Meet. Amer. Soc. Anim. Prod.* Nov. 30-Dec. 1, 1923. pp. 57-61.
- Finlay, G. F. 1924. Sterility in swine. *Natl. Council Pig Breed. and Feed. B.* 1.
- Laible, R. J., Bull, S., and Mitchell, H. H. 1924. Swine type tests favour intermediate pig. *Rpt. Ill. Agr. Expt. Sta.*:59-69.
- Mumford, F. B., and Bernard, P. M. 1924. Age as a factor in animal breeding. *Mo. Agr. Expt. Sta. B.* 210:34-36.

1924

- Shepperd, J. H., Christensen, F. W., Thompson, O. A., and Kuenning, A. C. 1924. Hairlessness in pigs (at the Williston substation). N. Dak. Agr. Expt. Sta. B. 174:96.
- Turner, J. H. 1924. A brief study of present day Hampshire sires and their ability to sire prizewinners. B.S. Thesis. Iowa State Col. Libr. Ames.
- Warwick, B. L. 1924. Vasectomy as a veterinary operation. J. Amer. Vet. Med. Assoc. 65, (N.S.)18:2.

1925

- Anon. 1925. (Crossbreeding). Ill. Agr. Expt. Sta. Rpt. 1924-1925:58-59.
- Anon. 1925. Type test with swine. Rpt. Iowa Agr. Expt. Sta.:62-63.
- Baker, J. R. 1925. On sex-intergrade hogs: their anatomy, genetics, and developmental physiology. Brit. J. Expt. Biol. 2:247-263.
- Baker, J. R. 1925. On the descended testes of sex-intergrade hogs. Q. J. Micros. Sci. 69:689-701.
- Craft, W. A. 1925. Linkage relations in animals. Proc. Okla. Acad. Sci., Vol. 5.
- Crew, F. A. E. 1925. Prenatal death in the pig and its effect on the sex ratio. Proc. Roy. Soc. Edinburgh. 46:9-14.
- Culbertson, C. C., and Evvard, J. M. 1925. The costly influence of an inferior sire. Iowa Agr. Expt. Sta. AH Sect. Leaflet 1.
- Ellis, N. R., and Hankins, O. G. 1925. Soft pork studies. I. Formation of fat in the pig on a ration moderately low in fat. J. Biol. Chem. 66:101-122.
- Hogan, A. G., Weaver, L. A., Edinger, A. T., and Trowbridge, E. A. 1925. The relation of feed consumed to protein and energy retention. Mo. Agr. Expt. Sta. Res. B. 73.
- Laible, R. J., Smith, R. A., Bull, S., and Longwell, J. H. 1925. Intermediate pigs still superior in type tests. Rpt. Ill. Agr. Expt. Sta.:55-57.
- Lush, J. L. 1925. The possibility of sex control by artificial insemination with centrifuged spermatozoa. J. Agr. Res. 30:893-913.
- Marshall, F. H. A., and Hammond, J. 1925. The physiology of animal breeding, with special reference to the problem of fertility. Min. of Agr. Monog. No. 2.
- McPhee, Hugh C., and Zeller, John H. 1925. Unusual coat colors in swine. J. Hered. 16:347-350.

1925

- Mumford, F. B., and McKenzie, F. F. 1925. Age as a factor in animal breeding. Mo. Agr. Expt. Sta. B. 228:31.
- Parkes, A. S. 1925. Studies on the sex ratio and related phenomena. VII. The foetal sex ratio in the pig. J. Agr. Sci. 15:284-299.
- Roberts, E., and Laible, R. J. 1925. Heterosis in pigs. J. Hered. 16:383-385.
- *Warwick, B. L. 1925. The effect of vasectomy on swine. Anat. Rec. 31(1):19-21.

1926

- Anon. 1926. (Crossbreeding). Ill. Agr. Expt. Sta. Rpt. 1925-26:51-52.
- Anon. 1926. Breeding swine for natural resistance to cholera. Rpt. Iowa Agr. Expt. Sta.:43.
- Anon. 1926. Swine inbreeding versus outbreeding. Rpt. Iowa Agr. Expt. Sta.:23.
- Baker, J. R. 1926. Sex in Man and Animals. Routledge. Lond. 175 pp.
- Baker, J. R. 1926. Asymmetry in hermaphrodite pigs. J. Anat. 60:374-381.
- Christensen, F. W., Thompson, O. A., and Jorgenson, L. 1926. Prolificacy of sows and mortality of pigs. N. Dak. Agr. Expt. Sta. B. 194. p. 83.
- Craft, W. A. 1926. What is the effect of inbreeding on size and quality of litters? Pol. China J. May 25.
- Craft, W. A. 1926. Effects of inbreeding studied. The Cattleman- July.
- Craft, W. A. 1926. Genetic investigations with swine at the Oklahoma station: a study of two different systems of breeding, limited inbreeding and out-crossing when practiced with swine. Okla. Agr. Expt. Sta. Bien. Rpt. 1924-26. p. 34-37.
- Crampton, E. W. 1926. Partial twinning in pigs. J. Hered. 17(11).
- Davidson, H. R. 1926. A comparison of Scandinavian and British pig-breeding methods. J. Min. Agr. (Gt. Brit.) 32:920-928.

1926

- Ellis, N. R., and Isbell, H. S. 1926. Soft pork studies. II. The influence of the character of the ration upon the composition of the body fat of hogs. J. Biol. Chem. 69:219-238.
- Evvard, J. M., and Culbertson, C. C. 1926. Studies of swine types. Amer. Hampshire Herdsman. 1:6-7. July.
- Evvard, J. M. 1926. Crossbred hogs win new laurels. Amer. Swineherd, No. 12:4.
- Evvard, John M., Culbertson, C. C., Shearer, P. S., Bassett, C. F., and Hammond, W. E. 1926. Crossbreds versus purebreds in producing market hogs. II. Development of the crossbred and purebred pigs from weaning time to market. Iowa Agr. Expt. Sta. AH Sect. Leaf. 20. pp. 6-11.
- Ferrin, E. F., and McCarty, M. A. 1926. A comparison of lard and bacon types of hogs. U. Minn. Mimeo (10-20-26).
- Hammond, J. 1926. The importance of a prolific strain. Pig. Breed. Annu. 6:73-75.
- Hankins, O. G., and Ellis, N. R. 1926. Some results of soft pork investigations. USDA B. 1407.
- Hogan, A. G., and McKenzie, F. F. 1926. Fecundity of swine: The normal sexual cycle and the cycle as influenced by age and by unfavourable dietary conditions. Mo. Agr. Expt. Sta. B. 244:24.
- McDonald, H. G. 1926. A study of inbreeding, with special reference to its application in pork production. M.S. Thesis. Iowa State Col. Libr. Ames.
- McKenzie, F. F. 1926. The normal oestrus cycle in the sow. Mo. Agr. Expt. Sta. Res. B. 86.
- McKenzie, Fred F. 1926. Growth of swine. Mo. Agr. Expt. Sta. Res. B. 96.
- Parkes, A. S. 1926. Studies on the sex-ratio and related phenomena. VIII. The seasonal sex-ratio in the pig. Z. indukt. Abst. Vererbg., 40:121-138.
- Shearer, P. S., Evvard, John M., Culbertson, C. C., and Hammond, W. E. 1926. Crossbreds versus purebreds in producing market hogs. I. General plan of experiment together with data for the period, mating to weaning time. Iowa Agr. Expt. Sta. AH Sect. Leaf. 20. pp. 1-6.

1926

- Sinclair, R. D. 1926. The effect of feed and method of feeding on type of hog and quality of carcass produced. M.S. Thesis. Iowa State Col. Libr. Ames.
- Smith, A. D. B. 1926. Geneticist's point of view in mating pigs. Pig Breed. Annu. 6:42-47.
- Warwick, B. L. 1926. Inheritance of black in swine. J. Hered. 17: 251-255.
- *Warwick, B. L. 1926. Intra-uterine migration of ova in the sow. Anat. Rec. 33(1):29-33.
- *Warwick, B. L. 1926. A study of hernia in swine. Wis. Agr. Expt. Sta. B. 69.
- Warwick, B. L., and Van Lone, E. E. 1926. The effect of castration on pigs at different ages. J. Amer. Vet. Med. Assoc. 69(N.S.) 22(5):1-9.
- Wentworth, E. N. 1926. Progressive Hog Raising. Armour & Co. 160 p.

1927

- Anon. 1927. Swine feeding and breeding experiments at the Iowa Station. Rpt. Iowa Agr. Expt. Sta. pp. 17, 18 and 21.
- Brambell, F. W. R. 1927. The histology of an hermaphrodite pig and its developmental significance. J. Anat. 63:397-407.
- Brody, S. 1927. Growth and development with special reference to domestic animals. III. Growth rates, their evaluation and significance. Mo. Agr. Expt. Sta. Res. B. 97.
- Cole, L. J. 1927. Genetic foundations in crossbreeding. Rec. Proc. 18th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-29, 1925. pp. 39-42.
- Crew, F. A. E. 1927. Abnormal sexuality in animals. II. Physiological. Q. Rev. Biol. 2:249-266.
- Crew, F. A. E. 1927. The Genetics of Sexuality in Animals. Cambridge U. Press.
- *Culbertson, C. C., and Evvard, John M. 1927. A superior litter of crossbred pigs. Rec. Proc. 18th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-29, 1925. pp. 53-59.
- Davidson, H. R. 1927. Variations in carcass type for pork and bacon. Scot. J. Agr. 10:394-403.

1927

- Davidson, H. R., and Andreassen, J. 1927. Pig carcasses for Wiltshire bacon. J. Min. Agr. 33:1095-1102.
- Ferrin, E. F. 1927. The Danish system of swine improvement. Rec. Proc. 19th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 26-28, 1926. pp. 231-235.
- *Hadley, F. B., and Warwick, B. L. 1927. Inherited defects of livestock. J. Amer. Vet. Med. Assoc. 70(N.S.) 23:492-504.
- Haldane, J. B. S. 1927. The comparative genetics of colour in rodents and carnivora. Bio. Rev. 2:199-212.
- Hogan, A. G., and McKenzie, F. F. 1927. Fecundity of swine: the normal sexual cycle, as influenced by unfavorable dietary conditions. Mo. Agr. Expt. Sta. B. 256. pp. 46-50.
- Hughes, W. 1927. Sex-intergrades in foetal pigs. Biol. B. 52:121-137.
- Keller, L. D. 1927. Crossbreds versus purebreds in producing market hogs. M.S. Thesis. Iowa State Col. Libr. Ames.
- Lush, Jay L. 1927. Percentage of blood and Mendelism. J. Hered. 18:351-367.
- McPhee, Hugh C. 1927. The value of herdbook data for the genetic investigation of sex ratio and frequency of sex combinations in swine. Rec. Proc. 19th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 26-28, 1926. pp. 203-206.
- McPhee, Hugh C. 1927. The swine herdbook as a source of data for the investigation of the sex ratio and frequency of sex combinations in pig litters. J. Agr. Res. 34(8):715-726.
- Mumford, F. B., Hogan, A. G., and Mackenzie, F. F. 1927. Swine breeding: the effect of age, unfavorable dietary conditions, and the normal oestrous cycle. Rec. Proc. 18th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-29, 1925. Chicago. pp. 85-87.
- Roberts, E. 1927. Inheritance of resistance to disease. Rec. Proc. 18th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-29, 1925. pp. 50-53.
- Roberts, E. 1927. Study of hairlessness now directed at causes. Rpt. Ill. Agr. Expt. Sta. :74.
- Roberts, E., and Card, L. E. 1927. Further data on inheritance of resistance to disease. Rec. Proc. 19th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 26-28, 1926. pp. 201-203.
- Roberts, E., and Carroll, W. E. 1927. Work with hog cholera at the Illinois Station. Rpt. Ill. Agr. Expt. Sta.:88-90.

1927

- Severson, Albert. 1927. Prolificacy of sows and mortality of pigs. Rec. Proc. 18th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-29, 1925. pp. 60-62.
- Sinclair, R. D., and Sackville, J. P. 1927. A study of some problems in bacon hog production. Alberta Col. Agr. B. 15, 61 pp.
- Warwick, B. L. 1927. What factors determine the number, size and weight of newborn pigs. Wis. Agr. Expt. Sta. B. 396:64-67.
- Wentworth, E. N. 1927. Practical considerations in crossbreeding. Rec. Proc. 18th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-29, 1925. pp. 42-49.

1928

- Anon. 1928. Breeding for resistance to cholera in swine. Rpt. Iowa Agr. Expt. Sta. :33-34.
- Anon. 1928. Type tests with swine. Rpt. Iowa Agr. Expt. Sta.:48-49.
- Baker, J. R. 1928. A new type of mammalian intersexuality. British J. Expt. Biol. 6:56-64.
- Calder, A., and Smith, A. D. B. 1928. Pig testing. The result of preliminary work on bacon type. Scot. J. Agr. 11:318-325.
- Carroll, W. E., and Roberts, E. 1928. Crossbred pigs prove no better than purebreds. Rpt. Ill. Agr. Expt. Sta. :124.
- Craft, W. A. 1928. The influence of the sire upon the market value of livestock. Okla. Farmer-Stockman, August 1.

1928

- Craft, W. A. 1928. What is a sire worth to the Oklahoma farmer? Okla. Farmer-Stockman, April 15.
- Craft, W. A. 1928. A survey of livestock feeding and breeding practices. Okla. Agr. Expt. Sta. Cir. 73.
- Craft, W. A. 1928. Variations among outbred and inbred litters of swine. Rec. Proc. 20th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-27, 1927. pp. 62-64.
- Crampton, E. W. 1928. Individual feeding for comparative feeding trials with hogs. MacDonald Col. Tech. B. 5.
- *Culbertson, C. C., Evvard, John M., Kildee, H. H., and Helser, M. D. 1928. Swine performance record. Litter comparisons. Series I. Iowa Agr. Expt. Sta. Leaf. 26.
- Davidson, H. R., and Smith, A. D. B. 1928. Pig testing and recording for the purpose of advanced registry. Pig Breed. Annu. 1927-28. pp. 3-19, 46-62.
- Evans, H. M. 1928. The effect of inadequate vitamin B upon sexual physiology in the male. J. Nutr. 1. (1):1-21.
- *Evvard, John M., Snell, M. G., Culbertson, C. C., and Snedecor, George W. 1928. Correlations between daily gains and feed requirements of growing and fattening swine. Rec. Proc. 20th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-27, 1927. pp. 85-92.
- Grimes, J. C., and Sewell, W. E. 1928. Improving scrub hogs by the use of purebred sires. Rpt. Ala. Agr. Expt. Sta. 12-13.
- *Griswold, D. J., Trowbridge, P. F., Hogan, A. G., and Haigh, L. D. 1928. The effect of gestation and lactation upon the growth and composition of swine. Mo. Agr. Expt. Sta. Res. B. 114.
- Hammond, J. 1928. Growth and conformation in the pig. Pig Breed. Annu. 1927-28. 7:76-81.
- *Hankins, O. G., Ellis, N. R., and Zeller, J. H. 1928. Some results of soft pork investigations. USDA B. 1492.
- Harms, E. L. 1928. Crossbreds versus purebreds in pork production. M.S. Thesis. Iowa State Col. Libr. Ames.
- Kuhlman, A. H. 1928. Birth weight as a factor in swine production. Ph.D. Thesis. U. Wis. Libr. Madison.

1928

- *McKenzie, Fred. F. 1928. Growth and reproduction in swine. Mo. Agr. Expt. Sta. Res. B. 118.
- *Nordby, J. E., and Taylor, B. L. 1928. A syncephalus thoracopagus monster in swine. Amer. Nat. 62:34-47.
- Nordby, Julius E. 1928. Sterility in boar responsible for reduced size of litters. J. Amer. Vet. Med. Assoc. 74:911-912.
- Roberts, E. 1928. Heredity looms larger in animal abnormalities. Rpt. Ill. Agr. Expt. Sta. :124-125.
- Scott, E. L. 1928. Some factors affecting the killing quality of hogs. Rec. Proc. 20th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-27, 1927. pp. 121-131.
- Sinclair, R. D., and Syrotuck, M. 1928. Age as a factor in swine reproduction. Sci. Agr. 8:492-497.
- Smith, A. D. B., and Calder, A. 1928. Pig testing. The results of preliminary work on bacon type. Scot. J. Agr. 11:318-325.
- Walker, H. M. 1928. A production and growth performance record of swine. M.S. Thesis. Iowa State Col. Libr. Ames.
- Warwick, B. L. 1928. Inheritance of scrotal hernia in swine. Ohio Bimonthly B. 13(1):15-18. Jan-Feb.
- Warwick, B. L. 1928. Prenatal growth in swine. J. Morph. & Phys. 46(1):59-84.
- Wentworth, E. N. 1928. The packer's interest in crossbreeding. Rec. Proc. 20th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-27, 1927. pp. 64-69.

1929

- Anon. 1929. Breeding for resistance to hog cholera at the Iowa Station. Iowa Agr. Expt. Sta. Rpt.:33-34.
- Anthony, D. J. 1929. Some variations in the number of ribs in pigs. Vet. J. 85:229.
- Bull, S., and Carroll, W. E. 1929. Type in swine as related to rate and to economy of gain and quality of pork. Ill. Agr. Expt. Sta. Cir. 345.

1929

- Bull, Sleeter, and Longwell, J. H. 1929. Swine type studies. II. Type in swine as related to quality of pork. Ill. Agr. Expt. Sta. B. 322.
- *Carroll, W. E., Bull, Sleeter, Rice, J. B., Laible, R. J., and Smith, R. A. 1929. Swine type studies. I. Type in swine as related to rate and economy of gain. Ill. Agr. Expt. Sta. B. 321.
- Cole, L. J., and Kuhlman, A. H. 1929. Birth weight - important factor in swine production. Wis. Agr. Expt. Sta. B. 405. pp. 63-64.
- Crampton, E. W. 1929. Individual feeding in swine experimentation. MacDonald Col. Tech. B. 5a.
- Deighton, T. 1929. A study of the metabolism of two breeds of pig (with some remarks on a third). J. Agr. Sci. (Eng.) 19(1): 140-184. Also Expt. Sta. Rec. 61(3):260.
- Evvard, John M. 1929. A new feeding method and standard for fattening young swine. Iowa Agr. Expt. Sta. Res. B. 118.
- *Evvard, John M., Culbertson, C. C., and Snedecor, George W. 1929. How many animals per experimental lot? Rec. Proc. 21st Annu. Meet. Amer. Soc. Anim. Prod. Nov. 30-Dec. 2, 1928. pp. 161-176.
- Hammond, J. 1929. The carcass classes at Smithfield. Pig Breed. Annu. 1928-29.
- Huang, Mao, I. 1929. Some factors affecting prolificacy in swine. M.S. Thesis. Iowa State Col. Libr. Ames.
- Hughes, W. 1929. The freemartin condition in swine. Anat. Rec. 41: 213-245.
- Johansson, Ivar. 1929. Length of gestation period in cattle and swine. Eng. Sum. (Swedish) 1928 Annu. Rpt. Agr. Expt. Sta. Ultima, Sweden. pp. 41-51.
- Grimes, J. C., Sewell, W. E., and Taylor, W. C. 1929. Improving scrub hogs by the use of purebred sires. Ala. Agr. Expt. Sta. Rpt. 13-15.

1929

- Kozelka, A. W. 1929. The inheritance of natural immunity among animals. J. Hered. 20:519-530.
- Kuhlman, A. H., and Cole, L. J. 1929. Birth weight important factor in swine production. Wis. Agr. Expt. Sta. B. 405:64.
- Lambert, W. V., Murray, C., and Shearer, P. S. 1929. Selection for natural resistance to cholera in swine. Rec. Proc. 21st Annu. Meet. Amer. Soc. Anim. Prod. Nov. 30-Dec. 2, 1928. pp. 33-37.
- MacCarthy, C. J. 1929. The department's policy in regard to the improvement of cattle and swine. Dept. Agr. J. 2:135-148. (Dublin).
- Mitchell, H. H., and Hamilton, T. S. 1929. Swine type studies. III. The energy and protein requirements of growing swine and the utilization of feed energy in growth. Ill. Agr. Expt. Sta. B. 323.
- Nordby, Julius E. 1929. Congenital skin, ear and skull defects in a pig. Anat. Rec. 42:267-280.
- *Nordby, Julius E. 1929. An inherited skull defect in swine. J. Hered. 20:228-232.
- *Nordby, Julius E. 1929. Sterility in boar responsible for reduced size of litters. J. Amer. Vet. Med. Assoc. 74(N.S.) 27(6): 911-914.
- Rodenwold, E. W. 1929. Correlation study of fecundity in registered Hampshire swine. M.S. Thesis. Iowa State Col. Libr. Ames.
- Shaw, A. M. 1929. Variations in the skeletal structure of the pig. Sci. Agr. 10:23-27.

1930

- Anon. 1930. Breeding experiments with Berkshire hogs. Rpt. Calif. Agr. Expt. Sta. (1929-1930):57.
- Anon. 1930. Swine performance record. Rpt. Iowa Agr. Expt. Sta. :52-53.
- Buckingham, J. L. 1930. An hermaphrodite pig. Vet. Rec. 10:967.
- Cole, L. J., Park, J. S., and Deakin, A. 1930. The seedy cut problem in swine. Rec. Proc. 22nd Annu. Meet. Amer. Soc. Anim. Prod. Nov. 29-Dec. 1, 1929. pp. 145-147.

1930

- Craft, W. A. 1930. The influence of birth weight upon subsequent development of inbred and outbred pigs. Rec. Proc. 22nd. Annu. Meet. Amer. Soc. Anim. Prod. Nov. 29-Dec. 1, 1929. pp. 128-130.
- Craft, W. A. 1930. Pigs inherit swirl hair. Rpt. Okla. Agr. Expt. Sta. (1927-30):86.
- Craft, W. A. 1930. Outbred hogs out gain inbred hogs. Rpt. Okla. Agr. Expt. Sta. (1927-30):78-81, 83-85.
- Davidson, H. R. 1930. Reproductive disturbances caused by feeding protein-deficient and calcium-deficient rations to breeding pigs. J. Agr. Sci. 20:233-264.
- Duckham, A. N. 1930. The interpretation of pig recording results. Pig Breed. Annu. 9:70-76.
- Ellinger, T. U. 1930. Is the size of litter a hereditary factor in swine? Pol. China J. 17(3):16-17.
- Ellis, N. R., and Zeller, J. H. 1930. Soft pork studies. IV. The influence of a ration low in fat upon the composition of the body fat of hogs. J. Biol. Chem. 89:185-197.
- Fargo, J. M., and Coyner, J. M. 1930. Experiments with swine in Alabama. Pigs that make best gains also yield best carcasses. Rpt. Ala. Agr. Expt. Sta. 1930 :24-25.
- Godbey, E. G. 1930. A study of the results of intensively inbreeding Berkshire swine. Rpt. S. C. Agr. Expt. Sta. 1930 :35.
- Goeser, P. A. 1930. The relative values of the wholesale cuts of pork from different types of hogs. M.S. Thesis. Iowa State Col. Libr. Ames.
- Grimes, J. C., Sewall, W. E., and Taylor, W. C. 1930. Grading up hogs by the use of purebred sires. Ala. Polytech. Inst. B. 234.
- Grimes, J. C., and Sewell, W. E. 1930. Experiments with swine in Alabama. Rpt. Alabama Agr. Expt. Sta.
- Habu, Y. 1930. Inheritance of face shape in swine. Jap. J. Genet. 6:143-167.

1930

- Hammond, John. 1930. Fertility in pigs. Pig Breed. Annu. 1929-30. 9:23-27.
- Helmreich, F. H. 1930. Factors influencing deposition of fat on the hog. Rec. Proc. 22nd Annu. Meet. Amer. Soc. Anim. Prod. Nov. 29-Dec. 1, 1929. pp. 143-145.
- Keith, T. B. 1930. Relation of size of swine litters to age of dam and to size of succeeding litters. J. Agr. Res. 41(8):593-600.
- Kerr, M. H. 1930. Crossbreds versus purebreds in pork production. M.S. Thesis. Iowa State Col. Libr. Ames.
- Korenchevsky, V. 1930. Experimental cryptorchidism in pigs. J. Path. and Bact. 33(3):683-687.
- *Longwell, J. H., Henderson, H. O., and Insko, W. M., Jr. 1930. Growth studies with swine. W. Va. Agr. Expt. Sta. B. 230.
- McKenzie, F. F., and Miller, J. C. 1930. Optimum time to breed swine. Mo. Agr. Expt. Sta. B. 285:43.
- McKenzie, F. F., and Miller, J. C. 1930. Length of the period of heat in gilts and sows and the length of the interval between heat periods. Mo. Agr. Expt. Sta. B. 285.
- *Nordby, Julius E. 1930. Congenital ear and skull defects in swine. J. Hered. 21:499-502.
- Russell, E. Z. 1930. Hog feeding tests show barrows gain more than gilts. USDA Yearbook 1930. pp. 320-323.
- Sasaki, K., and Moribe, K. 1930. On the serological distinction of the wild boar and the domestic pig. Annot. Zool. Jap. 12(2):433-439.
- Scott, E. L. 1930. Factors that influence the significance of carcass data. Rec. Proc. 22nd Annu. Meet. Amer. Soc. Anim. Prod., Nov. 29-Dec. 1, 1929. pp. 136-142.
- Scott, E. L. 1930. The influence of the growth and fattening process on the quantity and quality of meat yielded by swine. Ind. Agr. Expt. Sta. B. 340.

1930

Scott, E. L. 1930. The influence of the growth and fattening process on the quantity and quality of meat yielded by swine. Ph.D. Thesis. Purdue U. Libr. Lafayette.

Shaw, A. M. 1930. A method of determining the variations in the vertebral column of the live pig. Sci. Agr. 10:690-695.

1931

Anon. 1931. Genetic studies with swine at the Idaho Station. Idaho Agr. Expt. Sta. B. 179:20.

Anon. 1931. Hog experiments. 50th. Annu. Rpt. Ohio Agr. Expt. Sta. B. 497:128-132.

Clemente, L. S. 1931. A genetic study of inbreeding and outbreeding in Berkshire swine. Nat. Appl. Sci. B. 1:173-186.

Craft, W. A. 1931. Inbred and crossbred pigs in the feed yard. (Mimeo.) May 2, 1931.

Craft, W. A. 1931. The inheritance of hair whorls. Proc. Okla. Acad. Sci. 12:7-8.

Crampton, E. W. 1931. Individual feeding for the comparative feeding trial. Rec. Proc. 23rd Annu. Meet. Amer. Soc. Anim. Prod. Nov. 28-29, 1930. pp. 56-63.

*Culbertson, C. C., Evvard, John M., Kildee, H. H., and Helser, M. D. 1931. Swine performance record litter comparisons. Iowa Agr. Expt. Sta. B. 277.

Kitchin, A. W. M. 1931. Economic aspects of pig recording. J. Min. Agr. 37:957-965.

Goode, B. L. 1931. Milk production of sows. M.S. Thesis. Iowa State Col. Libr. Ames.

Hetzer, Herbert O. 1931. The relation between litter size and birth weights in swine. M.S. Thesis. Iowa State Col. Libr. Ames.

- →

Lush, Jay L. 1931. Interpreting the results of group feeding experiments. Rec. Proc. 23rd Annu. Meet. Amer. Soc. Anim. Prod. Nov. 28-29, 1930. pp. 44-55.

Lush, J. L., Culbertson, C. C., and Hammond, J. A. 1931. Weight at birth important in pigs. Pol. China J. 18:4.

1931

- Lush, Jay L. 1931. Predicting gains in feeder cattle and pigs. J. Agr. Res. 42:853-881.
- Lush, J. L., and Culbertson, C. C. 1931. The consequences of inbreeding Poland China hogs. Iowa Agr. Sta. Annu. Rpt. p. 23.
- *McKenzie, F. F. 1931. Cryptorchidism in swine and anatomy of cryptorchid boars. Mo. Agr. Expt. Sta. B. 300.
- McKenzie, F. F. 1931. A method for the collection of boar semen. Amer. Vet. Med. Assoc. 78:244-246.
- McPhee, Hugh C. 1931. Swine inbreeding at the United States Department of Agriculture Laboratories and at the State Experiment Stations. Rec. Proc. 23rd Annu. Meet. Amer. Soc. Anim. Prod. Nov. 28-29, 1930. pp. 128-131.
- McPhee, Hugh C. 1931. Swine inbreeding at the United States Department of Agriculture -- a progress report. Rec. Proc. 23rd Annu. Meet. Amer. Soc. Anim. Prod. Nov. 28-29, 1930. pp. 131-134.
- *McPhee, Hugh C., Eaton, O. N., Russell, E. Z., and Zeller, John. 1931. An inbreeding experiment with Poland China swine. J. Hered. 22:393-403.
- Racz, M. 1931. Problems and methods of breeding lard hogs. Monthly B. Agr. Sci. and Practice. 22:467-474.
- Roberts, Elmer and Carroll, W. E. 1931. The inheritance of "hairlessness" in swine. Hypotrichosis II. J. Hered. 22:125-132.
- Robison, W. L. 1931. The causes of soft pork. Ohio Agr. Expt. Sta. Bimo. B. 340.
- Russell, E. Z. 1931. Age as a factor in brood sow performance. (Mimeo) Bur. Anim. Ind. AH.
- Rothwell, G. B., MacMillan, A. A., and Peterson, A. W. 1931. The advanced registry policy for pure-bred swine. Live Stock, Br. Dominion Dept. Agr. Ottawa, Canada, 10 pp.
- Sanders, H. G. 1931. Sows' milk yields. J. Min. Agr. 37:1041-1042.
- Scott, E. L., and Block, H. W. 1931. A method for removing fat samples from live hogs. J. Agr. Res. 42:47-51.
- Shearer, P. S., and Culbertson, C. C. 1931. Outbreeding versus crossbreeding with swine. Annu. Rpt. Iowa Agr. Expt. Sta. 24.

1931

Smith, A. D. B. 1931. Litter size. Is it inherited. Pig Breed. Ann. 1930-31. pp. 46-52.

*Warwick, B. L. 1931. Breeding experiments with sheep and swine. Ohio Agr. Expt. Sta. B. 480:25.

1932

Anon. 1932. Swine experiments. 51st Annu. Rpt. Ohio Agr. Expt. Sta. B. 516:81-84.

Aubel, C. E., Hughes, J. S., and Lienhardt, H. F. 1932. A study of mortality among young pigs. The influence of wheat germ meal on the reproduction and suckling of pigs. Kans. Agr. Expt. Sta. Tech. B. 31.

Brandt, A. E. 1932. A statistical study of the relation of sex, breed, and live measurements to carcass weight in swine. Ph.D. Thesis. Iowa State Col. Libr. Ames.

*Craft, W. A. 1932. Four generations of inbred pigs in the feed yard. Okla. Agr. Expt. Sta. Mimeo. Rpt. Apr. 30, 1932.

Craft, W. A. 1932. Further observations on inbred and outbred pigs in the feed yard. Rec. Proc. 24th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1931. pp. 265-266.

Craft, W. A., and Moe, L. H. 1932. Statistical observations involving weights, hemoglobin, and the properties of white blood cells in pigs. J. Amer. Vet. Med. Assoc. 81(N.S.) 34(3):405-407.

*Culbertson, C. C., Kildee, H. H., Helser, M. D., and Hammond, W. E. 1932. Swine performance record. Litter comparison. Series II. Iowa Agr. Expt. Sta. Leaflet 28.

David, L. T. 1932. Histology of the skin of the Mexican hairless swine (*Sus scrofa*). Amer. J. Anat. 50:283-292.

Deakin, A. 1932. Melanic pigmentation of the mammary glands of black breeds and a red breed of pigs. Proc. VI Int. Cong. Gen. 2:41-42. (ABA 1:26).

*Deakin, Alan. 1932. Cases of extreme sexual infantilism in the sow. Anat. Rec. 51(3):361-371.

Godbey, E. G., and Starkey, L. V. 1932. A genetic study of the effects of intensively inbreeding Berkshire swine. S. Car. Agr. Expt. Sta. Annu. Rpt. p. 42.

→
Hammond, J. 1932. Pigs for pork and pigs for bacon. J. Roy. Agr. Soc. England. 93:131-145.

Habu, Y. 1932. Comparison of the growth of swine with special reference to the utilisation of F₁. Imp. Zootech. Expt. Sta. Chiba-Shi, B. 30.

1932

- Hammond, J., and Marshall, F. H. 1932. Fertility and animal breeding. Min. Agr. Fish B. 39.
- Henning, G. F., and Stout, W. B. 1932. Factors influencing the dressing percentage of hogs. Ohio Agr. Expt. Sta. B. 505.
- Johansson, I. 1932. Problems in breeding for high prolificacy. Pig Breed. Annu. 1931-32. 11:80-87.
- Lush, Jay L. 1932. The amount and kind of inbreeding which has occurred in the development of breeds of livestock. Proc. Sixth Internatl. Cong. Genet. Aug. 24-31, 1932. 2:123-126. Ithaca.
- *Lush, Jay L. 1932. An empirical test of the approximate method of calculating coefficients of inbreeding and relationship from livestock pedigrees. J. Agr. Res. 45:565-569.
- *Lush, Jay L. 1932. Genetic aspects of the record of performance work with swine. Rec. Proc. 24th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1931. pp. 51-62.
- McKenzie, F. F. 1932. Breeding experiments at the Missouri Experiment Station. Mo. Agr. Expt. Sta. B. 310.
- McPhee, H. C. 1932. The effects of inbreeding and crossbreeding on swine. Proc. VI Int. Cong. Genetics. 2:132-133. (ABA 1:27).
- McPhee, Hugh C. 1932. Size of litter as a selection index in swine. Rec. Proc. 24th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1931. pp. 262-264.
- *Morris, H. P., and Johnson, D. W. 1932. Effects of nutrition and heredity upon litter size in swine and rats. J. Agr. Res. 44(6):511-521.
- Nordby, J. E. 1932. Type in market swine and its influence on quality of pork. Idaho Agr. Exp. Sta. B. 190.
- Nordby, Julius E. 1932. Inheritance of whorls in the hair of swine. J. Hered. 23:397-404.
- Rodolfo, A., and Timofeeva, T. 1932. Some data on the physiology of reproduction in the boar. Probl. Zhivotn. (9/10):101-102. (ABA 1:112).
- Severson, A. 1932. Experiments with livestock in North Dakota. N. Dak. Agr. Expt. Sta. B. 256.

1933

- Anon. 1933. Pig testing results. Iowa Agr. Expt. Sta. Leaf. 30.
- Bryden, W. 1933. The chromosomes of the pig. Cytol. 5:148-153. (ABA 3:47).
- Cole, L. J., Park, J. S., and Deakin, A. 1933. Seedy cut as affecting bacon production. Wis. Agr. Expt. Sta. B. 118. (ABA 1:254).
- *Craft, W. A. 1933. Further observations on inbred and outbred pigs. Okla. Agr. Expt. Sta. Mimeo. Rpt. Apr. 22, 1933.
- Craft, W. A. 1933. Inheritance of swirl hair in hogs. Okla. Agr. Expt. Sta. Mimeo. Rpt. Apr. 22, 1933.
- *Culbertson, C. C., Kildee, H. H., Helser, M. D., and Hammond, W. E. 1933. Swine performance record. Litter comparisons. Series III. Iowa Agr. Expt. Sta. Leaflet 30. (ABA 2:336).
- D'Amour, F. E., D'Amour, M. C., and Gustavson, R. G. 1933. The estrin content of sow ovaries. J. Pharmacol. Expt. Ther. 49:141-145. (ABA 1:302).
- Davis, W. C., McCarthy, B. F., and Burgess, J. A. 1933. Market classes and grades of pork carcasses and fresh pork cuts. USDA Cir. 288.
- Deakin, Alan. 1933. Melanic pigmentation of the mammary glands of fetal and early post natal pigs. M.S. Thesis. U. of Wis. Libr. Madison.
- Faiermark, S., and Bigos, V. 1933. The hormonal method of early pregnancy diagnosis in the sow. Prob. Zhivotn. No. 1:73-75. (ABA 1:109).
- Ferrin, E. F. 1933. Pig testing in the U.S.A. Pig Breed. Annu. 1932-33, 12:53-57.
- Ferrin, E. F. 1933. Production tests for selection of breeding hogs. Rec. Proc. 25th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-26, 1932. pp. 134-137. (ABA 1:109).
- Gonsalez, B. M. 1933. The animal improvement program of the College of Agriculture. Phil. Agr. 21:1-8. (ABA 2:186).
- Hale, Fred, 1933. Pigs born without eyeballs. J. Hered. 24:105-106.
- Hammond, J. 1933. Pigs for pork and pigs for bacon. J. Roy. Agr. Soc. Eng. 93:131-145. (ABA 2:23).
- Davidson, H. R. 1933. Pig recording as a factor in cheapening and increasing pig production. J. Min. Agr. 40:42-50.

1933

- Harman, M. T. 1933. Two pigs within a single chorion with some considerations concerning monochorionic twins. Trans. Kans. Acad. Sci. 36:220-223. (ABA 3:48).
- *Hughes, E. H. 1933. Inbreeding Berkshire swine. J. Hered. 24: 199-203. (ABA 1:176).
- Ivanov, M. F. 1933. The Ukranian Steppe White Pig - a new breed. Probl. Zhivotn. 1:32-42. (ABA 1:109).
- Krallinger, H. F., and Schott, A. 1933. Studies on sex and reproduction of livestock. II. The influence of time of mating during oestrus on fertility and sex ratio of progeny in the pig. Arch. Tierernahrg. Tierz. 9:41-49. (ABA 1:110).
- *Lacy, Myron D. 1933. Differences between barrows and gilts in the proportion of pork cuts. Rec. Proc. 25th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-26, 1932. pp. 354-357.
- Lush, Jay L. 1933. Linebreeding. Iowa Agr. Expt. Sta. B. 301. (ABA 1:153).
- *Lush, Jay L. 1933. Use of statistical methods in animal husbandry. (Abs.) Rec. Proc. 25th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-26, 1932. pp. 15-19. (ABA 1:74).
- Moltesen, P. A. 1933. Some results of the experimental work on pigs in Denmark. Pig Breed. Annu. 1932-33 12:45-49.
- *Nordby, J. E. 1933. Cryptorchidism and its economic importance to the producer of swine and the processor of pork products. J. Amer. Vet. Med. Assoc. 82(35):901-912. (ABA 1:177).
- Nordby, J. E. 1933. Cryptorchidism and its influence on quality of pork. Idaho Agr. Expt. Sta. Res. B. 192.
- Nordby, Julius, E. 1933. Congenital melanotic skin tumors in swine. J. Hered. 24:361-364. (ABA 1:257).
- Ritzaffy, N. 1933. The role of inbreeding in the Turopolje pig. Z. Zuchtg. B. 27:419-422. (ABA 1:177).
- Russell, O. Z. 1933. The relation of birth weight to gains of pigs. USDA. Bur. Anim. Ind., AHD Mimeo.

1933

Shepperd, J. H., and Severson, Albert. 1933. Wiltshire sides - factors which influence production and quality. N. Dak. Agr. Expt. Sta. Tech. B. 263.

Smith, A. D. B. 1933. Pig testing and recording. Agr. Prog. 10: 114-119.

*Snedecor, George W., and Culbertson, C. C. 1933. An improved design for experiments with groups of animals whose outcome may be estimated. Rec. Proc. 25th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-26, 1932. pp. 25-28.

Wright, S. 1933. Inbreeding and recombination. Proc. Nat. Acad. Sci. 19:420-433. (ABA 1:136).

Wright, S. 1933. Inbreeding and homozygosis. Proc. Nat. Acad. Sci. 19:411-420. (ABA 1:135).

Zavoral, H. G. 1933. Swine herd improvement projects in Minnesota. Rec. Proc. 25th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-26, 1932. pp. 222-225. (ABA 1:113).

Zeller, J. H. 1933. Some practical results of swine investigations. Swine World. 20(7):6-7.

1934

Baxter, J. S. 1934. Some observations on the development of the vagina in the pig. J. Anat. (London) 68:239-250. (ABA 5:292).

*Craft, W. A. 1934. The effect of inbreeding on rate of growth and resistance to disease in swine. Proc. So. Agr. Workers Conv. Jan. 31-Feb. 2, 1934. Assoc.

Craft, W. A., and Moe, L. H. 1934. The hemoglobin level in pigs at various ages. Rec. Proc. 26th Annu. Meet. Amer. Soc. Anim. Prod. Dec. 1-2, 1933. pp. 127-131.

Craft, W. A., and Warner, E. A. 1934. Observations on different types of hair whorls in mammals and the inheritance of hair whorls in swine. Proc. Okla. Acad. Sci. 14:23-27.

Davidson, H. R. 1934. The results of 25 years of pig testing in Denmark and their relation to pig recording methods in Great Britain. Pig. Breed Annu. 1933-34. 13:34.-35.

1934

- Day, C. D. 1934. The descent of the testes in the pig; intra-abdominal pressure suggested as cause. J. Tenn. Acad. Sci. 9:18-46. (ABA 6:29).
- Elden, C. A. 1934. Oestrin and progestin content of the corpus luteum of the sow. Proc. Soc. Expt. Biol. 32:515-516. (ABA 3:47).
- *Ellis, N. R., and Zeller, J. H. 1934. Effect of quantity and kinds of feed on economy of gains and body composition of hogs. USDA Tech. B. 413.
- Grimes, J. C., Sewall, W. E., and Cottier, G. J. 1934. Some factors affecting the cost of raising pigs to weanling age. Ala. Agr. Expt. Sta. Cir. 68. Auburn.
- Hammond, John. 1934. The anatomy of pigs in relation to market requirements. Pig Breed. Annu. 1933-34. 13:28-33. (ABA 2:25).
- Hammond, John. 1934. Factors producing sterility with special reference to genetic causes. Proc. Roy. Soc. Med. 26:1183.
- Hammond, John. 1934. Pig Recording. Roy. Lancashire Agr. Soc. J. Agr. Prog. 11:127-129.
- Hammond, John and Murray, G. N. 1934. Grading meat. The prices given for carcasses of different weights and qualities. J. Agr. Sci. 24(2):233-249.
- Hankins, O. G., and Ellis, N. R. 1934. Physical characteristics of hog carcasses as measures of fatness. J. Agr. Res. 48:257-264.
- Hicks, J. S. 1934. Genetics and the practical breeder of pure-bred stock. Pig Breeders' Annu. 13:45-50.
- *Hughes, E. H., and Hart, Hugh. 1934. Defective skulls inherited in swine. J. Hered. 25:111-115. (ABA 2:127).
- *Hutt, F. B. 1934. Inherited lethal characters in domestic animals. Cornell Vet. 24(1):1-25.
- Krallinger, H. F., and Schott, A. 1934. Studies on sex and reproduction of livestock. III. The influence of the boar on litter size. Zuchtungskunde 9:175-179. (ABA 2:127).
- *Lush, Jay L., Anderson, A. L., Culbertson, C. C., and Hammond, W. E. 1934. The reliability of some measures of productiveness of individual brood sows. Rec. Proc. 26th Annu. Meet. Amer. Soc. Anim. Prod. Dec. 1-2, 1933. pp. 282-287. (ABA 2:128).

1934

- Lush, Jay L., Hetzer, H. O., and Culbertson, C. C. 1934. Factors affecting birth weights of swine. Genet. 19:329-343. (ABA 2:223-224).
- McPhee, H. C., and Zeller, J. H. 1934. The stillborn pig. Amer. Vet. Med. Assoc. J. 85:224-231. (ABA 3:158-159).
- *McPhee, Hugh C., and Buckley, S. S. 1934. Inheritance of cryptorchism in swine. J. Hered. 25:295-303. (ABA 3:49).
- Murray, G. N. 1934. A statistical analysis of growth and carcass measurement of baconers. Onderstepoort J. Vet. Sci. 2:301-360.
- Musson, A. L. 1934. A comparison of crossbreeding and purebreeding in pork production. M.S. Thesis. Iowa State Col. Libr. Ames.
- Nordby, J. E. 1934. White spotting in Duroc-Jersey swine. J. Agr. Res. 49(7):625-642. (ABA 3:159).
- Nordby, J. E., and Gildown, E. M. 1934. Modifying effect of cryptorchid testes on the homologous accessory sex glands in swine. Rec. Proc. 26th Annu. Meet. Amer. Soc. Anim. Prod. Dec. 1-2, 1933. pp. 271-273. (ABA 2:129-130).
- *Nordby, Julius E. 1934. Congenital defects in the mammae of swine. J. Hered. 25:498-502. (ABA 3:50).
- *Nordby, Julius E. 1934. Kinky tail in swine. J. Hered. 25:171-174. (ABA 2:224).
- Olbrycht, T. M. 1934. II. Studies on life performance of brood sows. The judging of brood sows by their number of offspring born and reared in the earliest litters. J. Agr. Sci. 33(2): 74-84.
- *Rhoad, A. O. 1934. Woolly hair in swine. J. Hered. 25:371-375. (ABA 3:51).
- Roberts, E., and Carroll, W. E. 1934. Swine selection studies continued. Ill. Expt. Sta. Rpt. 1933-1934. p. 101.
- Rein, I. I. 1934. The physiological role of the secretions of the accessory sex glands of the boar during the process of ejaculation. Prob. Anim. Husb. 3:141-143.
- >
- Rothwell, G. B., and Peterson, A. W. 1934. The advanced registry policy for pure-bred swine. Live Stock Br., Dominion Dept. Agric. Ottawa, Canada, 4 pp.
- Rodolfo, A. 1934. The physiology of reproduction in swine. I. The semen of boars under different intensiveness of mating. Phil. J. Sci. 53:182-203. (ABA 4:205-206).

1934

- Rodolfo, A. 1934. The physiology of reproduction in swine. II. Some observations on mating. Phil. J. Sci. 55:13-18. (ABA 4:206).
- Rodolfo, A. 1934. The physiology of reproduction in swine. III. Preliminary study of the morphology of spermatozoa. Phil. J. Sci. 55:165-173. (ABA 4:206-207).
- Smith, A. D. B., and Robison, O. J. 1934. Heredity in pigs. Vet. J. 90:119-127. (ABA 2:226-227).
- Taussig, S. 1934. Pig recording in different countries. Int. Rev. Agr. 25:6., T255, T261, T306, T317. (ABA 2:227) (ABA 2:339).
- van der Walt, S. J., and de Boom, H. P. A. 1934. Polydoctylism in a pig. Onderstepoort. J. Vet. Sci. Anim. Ind. 3:237-238. (ABA 2:339).
- Warner, K. F., Ellis, N. R., and Howe, P. E. 1934. Cutting yields of hogs as an index to fatness. J. Agr. Res. 48(3):241-255. (ABA 2:130).
- Yates, F. 1934. A complex pig-feeding experiment. J. Agr. Sci. 24: 511-531.

1935

- Anon. 1935. Crossbreeding swine at North Platte Substation. Annu. Rpt. 48, p. 31.
- Anon. 1935. Crossing for Pork and Bacon. Fmr. and Stk-Breed 49: 1378. (ABA 3:270).
- Bonsma, F. N., and Oosthuizen, P. M. 1935. Milk production in large black sows and its importance in relation to the production of weaners. S. African J. Sci. 32:360-378.
- Boyd, E. M., and Elden, C. A. 1935. The relation of lipids to oestrin and progestin in the corpus luteum of the sow. Endocrinol. 19:599-602. (ABA 4:61).
- Bull, Sleeter, Olson, F. C., Hunt, G. E., and Carroll, W. E. 1935. Value of present day swine types in meeting changed consumer demand. Ill. Agr. Expt. Sta. B. 415.
- Bywaters, James H., Culbertson, C. C., and Hammond, W. E. 1935. The relationship of degree of inbreeding to size of litter in Poland China pigs. Rec. Proc. 27th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 30-Dec. 1, 1934. pp. 215-217. (ABA 3:270-271).

1935

- Callow, E. H. 1935. Carcase quality of the pig in relation to growth and diet. *Emp. J. Expt. Agr.* 3:80-104.
- Casida, L. E. 1935. Prepuberal development of the pig ovary and its relation to stimulation with gonadotropic hormone. *Anat. Rec.* 61:389-396. (ABA 3:157).
- *Craft, W. A. 1935. The performance of inbred sires. Mimeo Rpt. Okla. Agr. Expt. Sta. April 13, 1935.
- Craft, W. A. 1935. The correlation of progress in genetic research with the prevailing practices in animal breeding: Discussion. *Rec. Proc. 27th Annu. Meet. Amer. Soc. Anim. Prod.* Nov. 30-Dec. 1, 1934. pp. 203-204.
- Craft, W. A. 1935. Influence of individuality on feed consumption by inbred and outbred pigs. *Proc. Assoc. So. Agr. Workers Conv.* 35:491.
- Craft, W. A. 1935. Type changes in an inbred stock of swine. *Rec. Proc. 27th Annu. Meet. Amer. Soc. Anim. Prod.* Nov. 30-Dec. 1, 1934. pp. 110-111. (ABA 3:271).
- Davidson, H. R. 1935. Whither pig recording. *Pig. Breed Annu.* 1934-35. 14:51.
- Deakin, A., and Fraser, E. B. 1935. Fecundity and nursing capacity of large Yorkshire sows. *Sci. Agr.* 15(7):458-462. (ABA 3:395).
- Enzmann, E. V., and Crozier, W. J. 1935. Relation between birth weight and litter size in multiparous mammals. *J. Gen. Phys.* 18:791-799.
- Faiermark, S. E. 1935. Hormonic pregnancy diagnosis in the sow. *Eng. Sum. (Russ.) Prob. Zooteh eksp Endokrin* 2:48-58. (ABA 4:62).
- Faiermark, S. E. 1935. On the origin of the sex hormone in urine of pregnant sows. *Eng. Sum. (Russ.) Prob. Zooteh. eksp Endokrin* 2:71-77. (ABA 4:62-63).
- Faiermark, S. E. 1935. The application of endocrine preparations for the artificial control of oestrus and ovulation in the pig. I. *Prob. Zooteh eksp Endokrin* 2:78-97. (ABA 4:63-64).
- Ferrin, E. F. 1935. Production records as a basis for selection. *Rec. Proc. 27th Annu. Meet. Amer. Soc. Anim. Prod.* Nov. 30-Dec. 1, 1934. pp. 112-114. (ABA 3:271).

1935

- Fourie, J. 1935. False masculine hermaphroditism in a pig. Onderstepoort J. Vet. Sci. 4:573-574. (ABA 3:272).
- French, M. E., and Emson, H. E. 1935. Pigs for Bacon Production. A comparative trial with Large White and Edelschwein pig. Annu. Rpt. Dept. Vet. Sci. Anim. Husb. Tanganyika Ter. 1935: 116-119. (ABA 5:40).
- Hammond, J. 1935. Large litters and small! Why? Fmr. & Stk. Breed 49 (pig suppl). (ABA 3:272-273).
- Hammond, J. 1935. The inheritance of productivity in farm livestock. I. Meat. Emp. J. Expt. Agr. 3(9):1-6. (ABA 3:119).
- Hammond, John. 1935. The production of pigs for bacon. Carcass quality and breeding for it. Proc. 19th. Rothamstead Conf., March 6, 1935. 19:3-7.
- Harkins, O. G. 1935. Relation between type in hogs and the plumpness of their hams. Rec. Proc. 27th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 30-Dec. 1, 1934. pp. 120-123.
- Hankins, O. G., and Ellis, N. R. 1935. A study of ham composition with special reference to type of hog. Amer. Soc. Anim. Prod. Proc. 20-30: 111-116.
- Hankins, O. G., and Zeller, J. H. 1935. Hogs of Danish origin imported for breeding studies in this country. 1935 USDA Ybk. of Agr. pp. 231-233.
- Henke, L. A. 1935. Is fecundity in swine inherited. J. Hered. 26: 455-456. (ABA 4:57).
- Hink, A. 1935. Twinning in livestock breeding. Cleft palate in identical twins. Deut. landw. Tierz. 39:573-574. (ABA 3:348).
- *Hodgson, R. E. 1935. An eight generation experiment in inbreeding swine. J. Hered. 26:209-217. (ABA 3:273-274).
- Hodgson, R. E., and Clark, R. T. 1935. Inbreeding swine for eight generations. Rec. Proc. 27th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 30-Dec. 1, 1934. pp. 212-214. (ABA 3:274).
- *Hughes, E. H. 1935. Polydactyly in swine. J. Hered. 26:415-418. (ABA 4:60).
- Hughes, E. H., and Hart, H. G. 1935. Production and composition of sows milk. J. Nutr. 9:311-322. (ABA 4:64).

1935

- Krizenecky, J. 1935. Litter size in the pig and its dependence upon non-genetic physiological factors. I. The influence of litter season, birth season of the sow, interval since last farrowing, and gestation length. Eng. Sum. (Czech). Sborn. cs1. Akad. Zemed. 10:64-72. (ABA 4:204).
- Krizenecky, J. 1935. Litter size in the pig and its dependence upon non-genetic physiological factors. II. Influence of the age of the sow and of the sequence of the litter. Eng. Sum. (Czech) Sborn. cs1. Akad. Zemed. 10(2):140-154. (ABA 4:327).
- Krizenecky, J. 1935. Factors controlling the gestation length in swine. Eng. Sum. (Czech) Sborn. cs1. Akad. Zemed. 10(4):351-358. (ABA 4:205).
- Krizenecky, J. 1935. A study of the correlation between the number of still-born pigs and litter size. Eng. Sum. Sborn. cs1. Akad. Zemed. 10:222-230. (ABA 4:205).
- Krizenecky, J. 1935. Sex-ratio in the pig and its dependence on non-genetic factors. Eng. Sum. Sborn. cs1. Akad. Zemed. 10:51-64. (ABA 4:204).
- Littlejohn, P. 1935. The preputial muscles of the pig. Aust. Vet. J. 11:234-236. (ABA 4:320).
- Lush, J. L. 1935. What progeny testing has achieved in Denmark. Pig Breed. Gaz. 35:25.
- Lymington, Viscount, G. V. W. 1935. The breeding of bacon pigs. J. Min. Agr. 42:19-24. (ABA 3:158).
- McPhee, Hugh C. 1935. The correlation of progress in genetic research with the prevailing practices in animal breeding. (Abs.) Rec. Proc. 27th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 30-Dec. 1, 1934. pp. 201-202.
- Olson, F. C., Hunt, G. E., and Carroll, W. E. 1935. Value of present-day swine types in meeting changed consumer demand. Ill. Agr. Expt. Sta. B. 415.
- Reid, J. W. 1935. Pig recording in Hertfordshire and Bedfordshire. J. Min. Agr. 42:766-776. (ABA 4:58).
- Rodin, I. M., and Lipatov, V. I. 1935. Artificial insemination of sows. Prob. Zhivotn. 9:108. (ABA 4:205).

1935

- Sinclair, R. D., and Murray, J. A. 1935. Some observations on carcass quality in the bacon hog. *Sci. Agr.* 16(4):169-174. (ABA 5:160-161).
- Smith, A. D. B. 1935. Telegony. *Pig Breed Gaz.* 31:31-32. (ABA 4:446).
- Ischernoizatonskaja (Cernoizatonskaja) E. P. 1935. Effect of pregnancy urine administration to female swine. *Endocrinol.* 19:413-414. (ABA 3:400).
- Whetham, E. O. 1935. Tables showing the carcass weight, carcass percentage and age in relation to the live weight of pigs. *Pig Breed. Annu.* 1934-1935. 14:188-189.
- Winters, L. M., Jordan, P. S., and Kiser, O. M. 1935. A six years' study of crossbreeding swine. *Rec. Proc. 27th Annu. Meet. Amer. Soc. Anim. Prod.* Nov. 30-Dec. 1, 1934. pp. 218-220. (ABA 3:275).
- *Winters, L. M., Kiser, O. M., Jordan, P. S., and Peters, W. H. 1935. A six years' study of crossbreeding swine. *Minn. Agr. Expt. Sta. B.* 320. (ABA 4:448).
- Yoshikawa, T. 1935. On hetero-chromia iridis in swine. *Proc. Imperial Acad. Japan* 11:125-128. (ABA 3:276).

1936

- Anon. 1936. Purebred vs. crossbred pigs. *Mo. Agr. Expt. Sta. Mimeo. Rpt.*
- Berge, S. 1936. Pig testing. An analysis of the results of bacon pig testing. *Eng. Sum. Norges Landbrukshoiskole. Statens Foredlingsstasjon for Svin 8 Meding.* Oslo.
- Blissett, A. H. 1936. Is there an ideal litter size? *Farms. Wkly.* 4(1):40. (ABA 4:320).
- Bondarenko, A. F. 1936. The improved Spotted Mergorod pig. *Eng. Sum. Prob. Zivotn.* 9:47-63. (ABA 5:38).

1936

- Burgos, C. X. 1936. Notes on the Jalajala pigs. Phil. J. Anim. Indus. 3:525-527. (ABA 5:38).
- Bywaters, J. H. 1936. The relative importance of heredity and environment in determining the variations in weaning weights of Poland-China pigs. Ph.D. Thesis. Iowa State Col. Libr. Ames.
- *Bywaters, James H., and Willham, Oliver S. 1936. A method of comparing growthiness in pigs weighed at different ages and subjected to different treatments. Rec. Proc. 28th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 29-30, 1935. pp. 116-119.
- *Clark, R. T., Kiser, O. M., and Winters, L. M. 1936. The value as sires for swine production of three inbred boars. Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1936. pp. 229-232. (ABA 5:291).
- Craft, W. A. 1936. Utilization of feed by inbred and outbred pigs. Proc. So. Agr. Workers Assoc. Conv. Feb.
- *Craft, W. A., and Willham, O. S. 1936. The role of nutrition in genetic research - Digestion trials with inbred and outbred pigs. Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1936. pp. 260-263. (ABA 5:292).
- Davidson, H. R., Hammond, J., Swain, J. B., and Wright, N. L. 1936. A method of judging pork and bacon carcasses. New Zeal. J. Agr. 54:203-223. (ABA 6:26).
- Dove, W. Franklin. 1936. The nutritive instincts and food habits of superior individuals as guides to the nutritional requirements of the group. Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1936. pp. 243-247.
- *Ellis, N. R., Craft, W. A., and Zeller, J. H. 1936. A preliminary study of variations in free-choice intake of the components of a standard ration and breeding as possible factors in the occurrence of lameness in pigs. Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1936. pp. 77-81.
- Fishwick, V. C. 1936. The production of high-grade pigs. J. Min. Agr. 43:235-240. (ABA 4:321).
- French, M. H., and Emson, H. E. 1936. Pigs for bacon production. A comparative trial with Large White and Edelschwein pigs. Tanganyika Ter. (ABA 5:39-40).

1936

- Hale, Fred and Godbey, C. B. 1936. The relative accuracy of one-day and three-day weights of pigs. Rec. Proc. 28th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 29-30, 1935. pp. 119-122.
- Hammond, J. 1936. Hereditary factors in pigs. Pig Breed. Annu. 1935-36. 15:25-30.
- Hammond, J. 1936. The problem of quality in relation to meat production. Scot. J. Agr. 19(1): 24-28.
- Hammond, J. 1936. The shape of the longissimus dorsi muscle in domestic animals. Festschrift Prof. Duerst, Bern. pp. 92-97.
- *Hankins, O. G., and Ellis, N. R. 1936. A study of ham composition with special reference to type of hog. Rec. Proc. Amer. Soc. Anim. Prod. Nov. 29-30, 1935. pp. 111-116.
- Hillebrand, P. 1936. Studies on the chromosome of three different breeds of the domestic pig. (Ger.) Diss. Landw. Hochsch. Hohenheim. 5:162-163.
- Howe, Paul E. 1936. Introductory remarks before the symposium on the relation of nutrition to genetics research. Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1936. p. 236.
- Johansson, I. 1936. The selection of pigs for breeding. Pig Breed. Gaz. Aug. 36:13, 15, 16, 130, 131.
- Johnson, S. R., Hogan, A. G., and Ashworth, U. S. 1936. Utilization of energy at different levels of protein intake. Mo. Agr. Expt. Sta. Res. B. 246.
- Kirk, W. G. 1936. Swine production in the southeast. Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1936. pp. 103-106.
- Kleiber, M. 1936. Problems involved in breeding for efficiency of food utilization. Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1936. pp. 247-258.
- Kronacher, C., and Hogleve, F. 1936. Investigations on the causes of rump shape in different breeds of pigs from X-ray studies. Z. Zucht. B. 35:161.
- Lambert, W. V., Ellis, N. R., Black, W. H., and Titus, H. W. 1936. The role of nutrition in genetic research. Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1936. pp. 236-243.

1936

- *Lush, Jay L. 1936. Genetic aspects of the Danish system of progeny-testing swine. Iowa Agr. Expt. Sta. Res. B. 204:107-196. (ABA 4:444-445).
- *Lush, Jay L., Thomas, B. H., Culbertson, C. C., and Beard, F. J. 1936. Variations in the softness of lard produced in the record of performance testing. (Abs.) Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1936. pp. 258-259. (ABA 5:290).
- Manresa, M., and Mondonedo, M. 1936. Resistance of the Berkjala breed of swine to hog cholera. Phil. Agr. 25:214-220. (ABA 6:25).
- McKenzie, Fred F., Miller, J. C., and Bauguess, L. C. 1936. Boar semen studies-a preliminary report. Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1936. pp. 99-102. (ABA 5:293).
- McMeekan, C. P. 1936. Critical study of important factors in successful pig-keeping. Analysis of litter records of the Manawatu-Oroua Pig Development and Recording Club for the years 1932-35. New Zeal. J. Agr. 52:278-289. (ABA 4:321-322).
- *McPhee, H. C., and Hankins, O. G. 1936. Swine--some current breeding problems. USDA Ybk. of Agr. pp. 887-905. (ABA 4:445-446).
- Minano, G. 1936. Comparative study of the productivity and adaptability of Berkshire, Duroc-Jersey and Poland China pigs to local conditions. Phil. J. Anim. Indus. 3:281-288. (ABA 4:439).
- Nesmejanova, T. N. 1936. The potassium, sodium and calcium content of the sperm and accessory secretions of the boar. Eng. Sum. Usp. Zootch. Nauk. 2:252-266. (ABA 5:43-44).
- Phillips, R. W. 1936. The physiology of spermatozoa. Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 29-30, 1935. pp. 222-235.
- Phillips, R. W., and Andrews, F. N. 1936. The development of the testes and scrotum of the ram, bull, and boar. Mass. Agr. Expt. Sta. B. 331.
- *Phillips, Ralph W., and Dawson, W. M. 1936. A study of methods for obtaining measurements of swine. Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1936. pp. 93-99. (ABA 5:290).

1936

Shaw, A. M., and MacEwan, J. W. G. 1936. A study of certain breeding practices in pig production. Sci. Agr. 16:322-330. (ABA 5:160).

Smith, A. D. Buchanan, Robison, O. J., and Bryant, D. M. 1936. The genetics of the pig. Bibliographia Genetica. 12:1-160. The Hague. Martinus-Nyhoff.

Tuff, P. 1936. Improvement in pig breeding. (Norw). Deut. landw. Tierz. 40:68-71. (ABA 4:201).

Tuff, P., and Berge, S. 1936. Inheritance of vertebral number and body length in pigs. (Ger.) Z. Zucht. B. 35:213-238. (ABA 4:447).

Vestal, C. M. 1936. Feeding and management experiments with brood sows and litters. Ind. Agr. Expt. Sta. B. 413.

*Winters, L. M. 1936. Studies of breeding for increased efficiency. Rec. Proc. 29th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 27-28, 1936. pp. 263-265.

Winters, L. M., Kiser, O. M., Jordan, P. S., and Peters, W. H. 1936. You will find greater profits with crossbred swine. Minn. Agr. Expt. Sta. Spec. B. 180.

Woodman, H. E., and Evans, R. E. 1936. The nutrition of the bacon pig. I. The influence of high levels of protein intake on growth, conformation, and quality in the bacon pig. J. Agr. Sci. 26:549-619.

1937

Anderson, Arthur L., and Bonsma, Jon C. 1937. Hereford hogs. J. Hered. 28:63-64. (ABA 5:158).

Anon. 1937. The export of frozen porkers. Report on five consignments of porkers exported to Smithfield. Rhod. Agr. J. 34:957-963. (ABA 8:64).

1937

- Anon. 1937. Breeding experiments with sheep and swine. Ohio Agr. Expt. Sta. B. 480.
- Anon. 1937. (Crossbreeding). S. C. Agr. Expt. Sta. Rpt. 1936-37:84-85.
- Anon. 1937. Inheritance of roses. Pig Breed. Gaz. 41:53-54. (ABA 5:415).
- Curtiss, Q. F. 1937. Experimental neurosis in the pig. Psychological B. 34:723.
- Armstrong, J. T. 1937. Litter testing. A system of production recording as applied to the brood sow. Tasmanian J. Agr. 8:88-92. (ABA 5:289).
- Baker, R. 1937. The crossbred as an export pig. Breeding experiments conducted at the Roseworthy Agricultural College. J. Dept. Agr. S. Aust. 41:446-456. (ABA 8:59).
- *Bywaters, James H. 1937. The hereditary and environmental portions of the variance in weaning weights of Poland China pigs. Genet. 22:457-468. (ABA 6:27).
- Crampton, E. W. 1937. Self versus handfeeding for market hogs, with particular reference to effects on carcass measurements and quality. Sci. Agr. 17:529-539.
- Davidson, H. R., Hammond, J., Swain, J. B., and Wright, N. L. 1937. Method for judging pork and bacon carcasses. Pig Breed. Annu. 1936-37. 16:49-63. (ABA 6:26).
- Davidson, H. R. 1937. Criss-cross pig breeding. Fmr. & Stk-Breed. 51:2926. 2 figs. (ABA 6:118).
- Davidson, H. R. 1937. Small litters and their causes. Fmr. & Stk-Breed. 51:1519. (ABA 6:29).
- Donald, H. P. 1937. The milk consumption and growth of suckling pigs. Emp. J. Expt. Agr. 5:349-360. (ABA 6:26).
- Donald, H. P. 1937. Suckling and suckling preference in pigs. Emp. J. Expt. Agr. 5(20):361-368. (ABA 6:26).
- *Eaton, O. N. 1937. A summary of lethal characters in animals and man. J. Hered. 28:320-326.
- Ellis, N. R., and Hankins, O. G. 1937. Some relationships between back-fat measurements and weight, firmness and other characteristics of hog carcasses. Rec. Proc. 30th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 26-28, 1937. pp. 242-246. (ABA 6:119).

1937

- Faiermark, S., and Singerman, L. 1937. Blood serum of pregnant mares as a powerful stimulant of sexual activity of the sow. B. Biol. Med. Expt. URSS 3:449-451. (ABA 7:135).
- Green, W. W., Barrett, C., and Winters, L. M. 1937. A technique for the sectioning of mammalian ova and blastocysts. Stain. Tech. 12:2.
- Hammond, John and Murray, G. N. 1937. The body proportions of different breeds of bacon pigs. J. Agr. Sci. 27(3):394-431. (ABA 6:27).
- Hanes, F. M., and Hooker, C. W. 1937. Hormone production in the undescended testis. Soc. Expt. Biol. and Med. Proc. 35:549-550. (ABA 5:164).
- Hankins, O. G., and Hiner, R. L. 1937. A progress report on the meat yields of Danish Landrace hogs in comparison with certain American breeds. Rec. Proc. 30th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 26-28, 1937. pp. 255-259. (ABA 7:324).
- Hindmarsh, W. L. 1937. Trembling in young pigs. Aust. Vet. J. 13:249-251. (ABA 6:121).
- Kyzer, E. D., and Clyburn, T. M. 1937. Comparison of crossbred versus purebred hogs as to rate and economy of gains. S. C. Agr. Expt. Sta. Annu. Rpt. 84-85.
- Lush, Jay L. 1937. Rate of gain and feed requirements as related to intensity of inbreeding. Reg. Swine Breed. Lab. Res. Item 1. Aug. 13, 1937. Ames, Iowa.
- Lush, Jay L., and Craft, W. A. 1937. Analysis of scores of live pigs scored by different judges. Reg. Swine Breed. Lab. Res. Item 3. Oct. 14, 1937. Ames, Iowa.
- Lush, Jay L., and Culbertson, C. C. 1937. Consequences of inbreeding Poland China pigs. Iowa Agr. Expt. Sta. Annu. Rpt. Part I. p. 80.
- *Lush, Jay L., and Molln, A. E. 1937. The degree to which litter size is a constant characteristic of sows. Rec. Proc. 30th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 26-28, 1937. 30:133-137. (ABA 6:121).
- Mansfield, W. S., Trehane, W. R., and Peacock, R. B. 1937. Final report of pig feeding experiment conducted on the Cambridge U. Farm in 1935 and 1936. J. Roy. Agr. Soc. 98:172-185. (ABA 6:119).

1937

- McMeekan, C.P. 1937. Carcass quality in bacon pigs. I. New Zealand bacon pigs in relation to United Kingdom market requirements. New Zeal. J. Agr. 54:147-158.
- McMeekan, C. P. 1937. Carcass quality in bacon pigs. II. The influence of supplementary concentrates on carcass-quality. New Zeal. J. Agr. 54:223-231. (ABA 6:119).
- Monzies-Kitchen, A. W. 1937. Fertility, mortality, and growth rate in pigs. J. Agr. Sci. 27(4):611-625. (ABA 5:414-415).
- Minano, G. 1937. Determination of the most favorable months for farrowing pigs in Alabang, Rizal. Phil. J. Anim. Indus. 4:225-232. (ABA 5:290-291).
- Robinson, V. E. 1937. Hypophysectomy and its consequences in the pig. B. Biol. Med. Expt. URSS 4:23-25. (ABA 7:136).
- Rottensten, K. 1937. Inbreeding and relationship in the Danish Landrace pig. Eng. Sum. Nord. Jordbr. forsk. 3(4)A:94-114. (ABA 8:398).
- Smith, A. D. B. 1937. Results from pig testing in Denmark. Prof. J. L. Lush's Rpt. Pig Breed. Gaz. Feb.
- Smith, A. D. B., and Donald, H. P. 1937. Weaning weights of pigs and litter sampling with reference to litter size. J. Agr. Sci. 27(4):485-502. (ABA 5:415).
- Stoohart, J. G. 1937. An analysis of swine progeny records. Canad. Dept. Agr. Pub. 550. Tech. B. 6.
- Thompson, Carl P. 1937. The effect of a low protein diet when fed to pregnant rats and sows upon the pre-natal and post-natal development of the young. Ph.D. Thesis, Iowa State Col. Libr. Ames.
- Warwick, B. L. 1937. Breeding experiments with sheep and swine. Ohio Agr. Expt. Sta. B. 480.
- Whatley, J. A., Jr. 1937. A method for comparing the growth rate of pigs weighed at different ages. M.S. Thesis. Iowa State Col. Libr. Ames.
- *Whatley, J. A., Jr. and Quaife, E. L. 1937. Adjusting weights of pigs to a standard age of 56 days. Rec. Proc. 30th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 26-28, 1937. pp. 126-130. (ABA 6:120).

1937

- Whatley, J. A., Jr. and Quaife, E. L. 1937. A method for correcting pig weights to a 56-day basis. Reg. Swine Breed. Lab. Res. Item 2. Aug. 20, 1937. Ames.
- *Winters, L. M., Jordan, P. S., Kiser, O. M., and Comstock, R. E. 1937. The Minnesota studies of crossbreeding swine. Rec. Proc. Amer. Soc. Anim. Prod. Nov. 26-28, 1937. pp. 196-203. (ABA 6:120).
- *Winters, L. M., Kiser, O. M., Jordan, P. S., and Peters, W. H. 1937. Crossbred swine. Minn. Agr. Expt. Sta. Ext. Ser. Spec. B. 180.
- Zavoral, H. G. 1937. The extension application of crossbreeding of swine. Rec. Proc. 30th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 26-28, 1937. pp. 204-205. (ABA 6:120).
- Zeller, J. H., Johnson, T. G., and Craft, W. A. 1937. The significance of weight changes in sows during the gestation and suckling periods. Rec. Proc. 30th Annu. Meet. Amer. Soc. Anim. Prod. Nov. 26-28, 1937. pp. 121-126. (ABA 6:123).

1938

- Annett, H. E. 1938. A new ear defect in pigs. J. Hered. 29:469-470. (ABA 7:31).
- Anon. 1938. Male and female families and tribes of the British Large White Breed. Based on pedigrees collected and published from 1884-1936. Nat'l Pig Breeders' Assoc. London. (ABA 8:318).
- Biffen, W. 1938. Encouraging breeding sows to milk. Fmrs' Wkly. 9(21):24. (ABA 7:325).
- Bjorka, K. 1938. Shrinkage and dressing yields of hogs. USDA Tech. B. 621.
- *Blunn, C. T., and Hughes, E. N. 1938. Hydrocephalus in swine. J. Hered. 29:203-209. (ABA 6:213).
- Craft, W. A. 1938. A survey of livestock breeding and feeding practices. Okla. Agr. Expt. Sta. Cir. 73.
- Crampton, E. W. 1938. The Analysis and Interpretation of Hog Carcass Data. The progress of swine improvement in Canada. Sci. Agr. 19(3):155-161. (ABA 7:29).

1938

- Donald, H. P., and Fleming, I. 1938. The effect of prenatal weight changes in breeding sows on the number and size of new born pigs. *Emp. J. Expt. Agr.* 6(24):341-349. (ABA 7:326).
- Eiiermark, S. E., and Singerman, L. S. 1938. Gonadotropic activity of pituitary at various stages of sexual cycle and pregnancy. *B. Biol. Med. expt. URSS* 6:89-92. (ABA 7:233).
- Hammond, J. 1938. Appraisal and judging of pig carcasses. *J. Dept. Agr. Vict.* 36:261-269. (ABA 8:61).
- Haring, F. 1938. The influence of time of mating during the oestrus period of the sow upon fertilization rate and the sex ratio of piglings. *Zuchtungskunde* 12:1-19. (ABA 6:122).
- Hart, G. H. 1938. Growth and early maturity. 13th Int. Vet. Cong. 882-894. (ABA 8:4).
- Hellberg, A. 1938. How many test groups are required in evaluating the progeny of a boar, and which is the most suitable size of these groups? *Eng. Sum. Nord. Jordbr. Forsk.* 2-3, A:65-88. (ABA 8:265).
- *Hetzner, H. O., and Phillips, Ralph W. 1938. A study of two methods for scoring certain characters in swine. *Rec. Proc. 31st Annu. Meet. Amer. Soc. Anim. Prod.* Nov. 25-27, 1938. pp. 141-146. (ABA 8:145).
- Holand, P. J. 1938. One year sow testing results. *Rec. Proc. 31st Annu. Meet. Amer. Soc. Anim. Prod.* Nov. 25-27, 1938. pp. 198-201. (ABA 8:146).
- *Ittner, N. R., and Hughes, E. H. 1938. A normal growth curve for swine. *J. Hered.* 29:385-386. (ABA 6:304).
- Kaay, F. C. van der. 1938. The influence of gonadotropic hormones upon the ovaries of the bitch, cow, and sow. *Eng. Sum. Int. Vet. Cong.* 1355-1368. (ABA 8:5).
- Kimura, G., and Cornwell, W. S. 1938. The progesterin content of the corpus luteum of the sow (*Sus scrofa*) during successive stages of the estrous cycle and pregnancy. *Amer. J. Physiol.* 112:471-476. (ABA 6:306).

1938

- Knox, R. G. 1938. 2. Test Station Operation. The progress of swine improvement in Canada. Sci. Agr. 19(3):143-146. (ABA 9:29).
- Koroveckaja, N. N. 1938. A study of some hereditary defects in the pig. Eng. Sum. Usp. Zootch. Nauk. 5(2):19-39. (ABA 7:232).
- Lefebvre, J. G. 1938. 3. Results of Station Testing in Canada. The progress of swine improvement in Canada. Sci. Agr. 19(3):147-154. (ABA 7:134).
- Lush, Jay L. 1938. A measure of individual net merit for 225-pound pigs. Reg. Swine Breed. Lab. Res. Item 9. Nov. 1, 1938. Ames.
- Lush, Jay L. 1938. Repeatability of scores made by the same man. Reg. Swine Breed. Lab. Res. Item 6. Apr. 12, 1938. Ames.
- Lush, Jay L. 1938. Should weight or age be used as an end point for test litters? Reg. Swine Breed. Lab. Res. Item 4. March 9, 1938. Ames.
- Lush, Jay L., and Craft, W. A. 1938. Further analysis of scores on pigs. Reg. Swine Breed. Lab. Res. Item 7. Apr. 30, 1938. Ames.
- Lush, Jay L., and Molln, Arthur E. 1938. Comparative influence of each point in determining total score. Reg. Swine Breed. Lab. Res. Item 8. Oct. 25, 1938. Ames.
- Marsh, T. D., and Kanagaratnam, N. 1938. Pig husbandry and preliminary feeding trials at the stock farm, Serdang. Malay Agr. J. 26:94-103. (ABA 7:328).
- *McKenzie, Fred F., Miller, J. C., and Bauguess, L. C. 1938. The reproductive organs and semen of the boar. Mo. Agr. Expt. Sta. Res. B. 279. (ABA 6:215).
- McMeekan, C. P. 1938. Growth and development in the bacon pig. Thesis. Cambridge U. Libr.
- McMeekan, C. P. 1938. Shape of the growth curve as a controlling factor in conformation and anatomical composition of the animal body - Swine. Rec. Proc. 31st Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-27, 1938. pp. 337-341. (ABA 8:393).

1938

- Minano, G. 1938. The improvement of swine in the Philippines. Phil. J. Anim. Indus. 5:319-325. (ABA 6:304).
- Minano, G. 1938. The improvement of swine in the Philippines. Phil. J. Anim. Indus. 5:471-477. (ABA 7:28).
- Pearsall, L. W. 1938. 6. The Market Quality of Canadian Bacon. The progress of swine improvement in Canada. Sci. Agr. 19(3): 173-176.
- Peterson, A. W. 1938. 1. Advanced Registry for Purebred Swine. The progress of swine improvement in Canada. Sci. Agr. 19(3): 139-142. (ABA 9:30).
- Peterson, A. W. 1938. Organized livestock development work in Canada. Rec. Proc. 31st Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-27, 1958. pp. 218-221. (ABA 8:146).
- Plum, Mogens. 1938. Inheritance of mammae in swine, a character involving partly symmetrical organs. Hereditas. 24:216-230. (ABA 6:121).
- Robison, W. L. 1938. Comparisons of purebred and crossbred pigs at the Madison County, Paulding County, and Miami County, Ohio Expt. Farms. Ohio Agr. Expt. Sta. Rpt. Mimeo.
- *Russell, E. Z., and Hutton, R. E. 1938. Comparative value of mature sows and gilts for producing market hogs. USDA Cir. 472.
- Scott, M. J. 1938. Pedigree-sow records. New Zeal. J. Agr. 56:449. (ABA 6:213).
- Scott, M. J. 1938. Which is the best baconer carcass? New Zeal. J. Agr. 57:23-24. (ABA 7:30).
- Starkey, L. V., and Godbey, E. G. 1938. A comparison of crossbred and purebred pigs. S. C. Agr. Expt. Sta. Annu. Rpt. 51:76.
- Stegeman, LeR. C. 1938. The European wild boar in the Cherokee National Forest. Tenn. J. Mammal. 19:279-290. (ABA 6:304).
- Stothart, J. G. 1938. 5. A Study of Factors Influencing Swine Carcass Measurements. The progress of swine improvement in Canada. Sci. Agr. 19(3):162-172. (ABA 9:30).

1938

- Szumowski, P., and Kielczewski, J. 1938. The morphological type of Pomorze breeding and bacon pigs from the bacon manufacturing district at Swiecie. Eng. Sum. (Pol) Przegl. hodowl., 12:206-214, 228-236. 3 figs. (ABA 8:263).
- Westerfeld, W. W., Thayer, S. A., MacCorquodale, D. W., and Doisy, E. A. 1938. The ketonic estrogen of sow ovaries. J. Biol. Chem. 126:181-193. (ABA 7:136).
- Whatley, J. A., Jr. 1938. Is growth rate in swine hereditary? Reg. Swine Breed. Lab. Res. Item 5. March 24, 1938. Ames.
- *Willham, Oliver S. 1938. Inbred sows vs. inbred boars in outcrosses. Rec. Proc. 31st Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-27, 1938. pp. 304-310. (ABA 8:148).
- Williams, S. 1938. Inherited pig faults. Breeding to obviate rigs, ruptures and roses. Fmrs' Wkly. 8(2):46. (ABA 7:332).
- Winters, L. M. 1938. The relationship of environment to selection. Rec. Proc. 31st Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-27, 1938. pp. 278-284.
- Young, D. 1938. Pig breeding and the bacon industry in Denmark. Vet. J. 94:408-416. (ABA 8:147).
- Zavoral, H. G. 1938. Sow testing. Rec. Proc. 31st Annu. Meet. Amer. Soc. Anim. Prod. Nov. 25-27, 1938, pp 193-198. (ABA 8:148).

1939

- Anon. 1939. The swine-breeding research farm. What it is, its operation, its purposes. Iowa Agr. Expt. Sta. and Bur. Anim. Ind., USDA, cooperating. (A pamphlet). Apr.
- Anon. 1939. Wattled pigs in Panama. J. Hered. 30:216-217. (ABA 7:232).
- Archibald, R. M., and Hancock, E. E. I. 1939. Iron deficiency as the probable cause of stillbirth in swine. Canad. J. comp. Med. 3:134. (ABA 7:332).

1939

- Baker, Marvel L. 1939. The interrelation of birth weight, weaning weight, weaning score, 180-day weight, and final score in swine. Reg. Swine Breed. Lab. Res. Item 11. Apr. 6, 1939. Ames.
- Ballinger, C. E. 1939. Carcass-yield of pigs 40 lb. to 70 lb. live-weight. New Zeal. J. Sci. Tech. (Agr) 21:175A-178A. (ABA 8:60).
- Callow, E. H. 1939. Growth factors affecting the quality of the pig's carcass. Report Food Invest. Bd. 1938 (London):45-53. (ABA 10:173).
- Clausen, H. 1939. Progress of Danish pig breeding. Pig. Breed. Annu. 1938-39. 18:25-35. (ABA 6:212).
- Comstock, R. E. 1939. The relationship between weaning weight and post weaning growth rate. Reg. Swine Breed. Lab. Res. Item 12. Apr. 12, 1939. Ames.
- Comstock, R. E. 1939. A study of the mammalian sperm cell. I. Variations in the glycolytic power of spermatozoa and their relation to motility and its duration. J. Expt. Zool. 81:147. (ABA 7:373).
- Comstock, R. E., and Green, W. W. 1939. Methods for semen evaluation. I. Density, respiration, glycolysis of semen. Rec. Proc. 32nd Annu. Meet. Amer. Soc. Anim. Prod. Dec. 1-3, 1939. pp. 213-216. (ABA 8:419).
- Craft, W. A., and Lush, Jay L. 1939. Total score as influenced by items classified under description on scoring sheets and by the six items of the score for pigs. Reg. Swine Breed. Lab. Res. Item 13. Apr. 13, 1939, Ames.
- Crampton, E. W. 1939. Growth and feed consumption of bacon hogs. Sci. Agr. 19(12):736-744. (ABA 7:325).
- Crew, F. A. E., and Koller, P. C. 1939. Cytogenetical analyses of the chromosomes in the pig. Proc. Roy. Soc. Edinburgh. 1938-39. 59(16):163-175.

1939

- Donald, H. P. 1939. The relative importance of sow and litter during the growth of suckling pigs. A comparison of fostered with normally reared pigs. *Emp. J. Expt. Agr.* 7(25):32-42. (ABA 7:326).
- Downey, L. A. 1939. Importance of body length in pigs. *Qd. Agr. J.* 51:199-200. (ABA 9:228).
- Edwards, J. 1939. An experiment in in-breeding. *Fmr. & Stk-Breed.* 53:598. (ABA 7:232).
- Evans, B. R. 1939. Suggestions on breeding investigations. *Rec. Proc. 32nd Annu. Meet. Amer. Soc. Anim. Prod.* Dec 1-3, 1939. pp. 37-40. (ABA 8:390).
- Fenske, T. H. 1939. A study of body measurements in swine appraisal. M.S. Thesis. U. of Minn. Libr. St. Paul.
- Fernandez, T. M. 1939. Study on the preparation of bacon. *Phil. J. Anim. Indus.* 6:391-403. (ABA 8:56).
- Ferrin, E. F. 1939. A factual basis for changing swine types. *Rec. Proc. 32nd Annu. Meet. Amer. Soc. Anim. Prod.* Dec. 1-3, 1939. pp. 125-128. (ABA 8:390).
- Fishwick, V. C. 1939. Crossbreeding with pigs. *J. Min. Agr.* 46: 583-587. (ABA 8:61).
- Fishwick, V. C. 1939. Crossbreeding with pigs - Rpt. No. 1. S. E. Agr. Col. 44:92-99, Wye, Kent.
- Freeman, V. A. 1939. Variation in the numbers of vertebrae in swine. *J. Hered.* 30:61-64. (ABA 7:135).
- Hankins, O. G., and Ellis, N. R. 1939. Fat in relation to quality and quantity factors in meat animal carcasses. *Rec. Proc. 32nd Annu. Meet. Amer. Soc. Anim. Prod.* Dec. 1-3, 1939. pp. 314-319. (ABA 8:322).
- *Hetzer, H. O., and Brier, G. W. 1939. Estimates of mean differences necessary for significance between pigs in group feeding experiments. *Rec. Proc. 32nd Annu. Meet. Amer. Soc. Anim. Prod.* Dec. 1-3, 1939. pp. 157-161.
- Hetzer, H. O., and Phillips, Ralph W. 1939. A study of two methods for scoring certain characteristics in swine. *Reg. Swine Breed. Lab. Res. Item 10.* Jan. 6, 1939. Ames.

1939

- Hiner, R. L., and Hankins, O. G. 1939. Significance of variation in ham conformation. J. Agr. Res. 59(4):293-302. (ABA 9:330).
- *Hutton, R. E., and Russell, E. Z. 1939. Production of hogs suitable for Wiltshire sides. USDA Cir. 532. (ABA 9:330-331).
- Jarl, F. 1939. Investigations into factors affecting the quality of pork. (Eng.) Z. Tierzucht Biol. 44(1):48-92. (ABA 9:133).
- Johnson, D. W. 1939. Livestock weights from measurements. Minn. Agr. Ext. Div. Ext. Folder 70.
- Johnson, D. W., and Palmer, L. S. 1939. Individual and breed variations in pigs on rations devoid of vitamin D. J. Agr. Res. 58:929-939. (ABA 9:31).
- *Lush, Jay L., and Anderson, A. L. 1939. A genetic history of Poland-China swine. I. Early breed history: the "hot blood" versus the "big type". J. Hered. 30:149-156. (ABA 8:57).
- *Lush, Jay L., and Anderson, A. L. 1939. A genetic history of Poland-China swine. II. "Founders of the breed": prominent individuals, length of generation. J. Hered. 30:219-224. (ABA 8:57).
- *Lush, Jay L., Shearer, P. S., and Culbertson, C. C. 1939. Cross-breeding hogs for pork production. Iowa Agr. Expt. Sta. B. 380: 81-116. (ABA 9:231).
- Marker, R. E., and Rohrmann, E. 1939. Sterols. LXXVIII. Sterols from sow pregnancy urine. J. Amer. Chem. Soc. 61:3476-3477. (ABA 8:398).
- McKenzie, F. F., Lasley, J. F., and Phillips, R. W. 1939. The storage of horse and swine semen. Rec. Proc. 32nd Annu. Meet. Amer. Soc. Anim. Prod. Dec 1-3, 1939. pp. 222-225. (ABA 8:327).
- McMeekan, C. P. 1939. The nature and variability of carcass characters of Danish and English bacon pigs. J. Agr. Sci. 29(1):131-141. (ABA 7:134).
- McMeekan, C. P., and Hammond, J. 1939. Improvement of carcass quality in pigs. J. Min. Agr. 46(3):238-243. (ABA 8:62).

1939

- Menzies-Kitchin, A. W. 1939. Mortality in pig production. Pig Breed. Annu. 1938-39. 18:35-40. (ABA 6:213).
1939.
- *Nordby, Julius, E./ Inequalities in the digits of swine. J. Hered. 30:307-310. (ABA 8:63).
- Olsen, H. M. 1939. Suckling pigs' vitality and growth rate. Eng. Sum. (Dan.) K. Vet. og Landbohojskole Forsogslab. (Denmark) Beret. (Del C) 186: 125 -146.
- Phillips, Ralph W., Hetzer, H. O., and Hiner, R. L. 1939. Relation of scores of swine to carcass yields and certain carcass measurements. Reg. Swine Breed. Lab. Res. Item 15. Nov. 6, 1939. Ames. Mimeo.
- Pomeroy, R. W. 1939. Review of pig experimental work at Cambridge, 1938-39. Pig Breed Annu. 1939-40, 19:123-126. (ABA 7:329).
- Roberts, E., and Carroll, W. E. 1939. A study of hybrid vigor in a cross between Poland China and Duroc Jersey swine. J. Agr. Res. 59(11):847-854. (ABA 8:397-398).
- Schmidt, J., and Hogreve, F. 1939. Investigations on the body conformation in the pig with special reference to the supporting framework. I. Methods of investigation and investigations on the Edelschwein. Z. Tierz. Zucht. Biol. 44:1-49.
- Smith, A. D. B., and Donald, H. P. 1939. Analysis of post-weaning growth in pigs. J. Agr. Sci. 29(2):274-294. (ABA 8:147).
- Starkey, L. V. 1939. A comparison of crossbred and purebred pigs. S. C. Agr. Expt. Sta. Annu. Rpt. 52. p. 86.
- Swinehart, D. M. 1939. Superfetation in a sow. J. Amer. Vet. Med. Assoc. 94:125-126. (ABA 8:149).
- Turner, C. W. 1939. The comparative anatomy of the mammary glands. Chapt. 16. The anatomy of the mammary glands of swine. U. Coop. Store, Columbia, Mo.
- Wentworth, E. N. 1939. Returning to type in America. Pig Breed. Annu. 1939-40. 19:42-47. (ABA 7:330).
- Whatley, J. A., Jr. 1939. Influence of heredity on rate of gain in Poland-China pigs. Ph.D. Thesis. Iowa State Col. Libr. Ames.

1939

*Willham, O. S., and Craft, W. A. 1939. An experimental study of inbreeding and outbreeding swine. Okla. Agr. Expt. Sta. Tech. B. 7. (ABA 9:231-232).

Winters, L. M. 1939. The ideal hog. Reg. Swine Breed. Lab. Res. Item 14. July 10, 1939. Ames.

Wright, Sewall. 1939. Genetic principles governing the rate of progress of livestock breeding. Rec. Proc. 32nd Annu. Meet. Amer. Soc. Anim. Prod. Dec. 1-3, 1939. pp. 18-26. (ABA 8:332).

1940

Anon. 1940. Limitation of breeds of pigs. Past. Rev. 50:1090. (ABA 9:131).

Ballinger, C. E. 1940. Feeding sows immediately after weaning and six weeks before farrowing means more pigs per litter. New Zeal. J. Agr. 60:351-355. (ABA 8:390).

Berge, S. 1940. Duration of pregnancy in the pig. Eng. Sum. Meld. Horg. Landbr Hogsk. 20:82-119. (ABA 9:232).

Bogart, R., Weaver, L. A., and Comfort, J. E. 1940. The relation of items in live hog and carcass scores to the total carcass score in swine. Reg. Swine Breed. Lab. Res. Item 19. Nov. 15, 1940. Ames.

Bogart, Ralph, Weaver, L. A., and Comfort, J. E. 1940. Carcass studies including scores, measurements, and yields. Reg. Swine Breed. Lab. Res. Item 17. Apr. 12, 1940. Ames.

Cameron, H. S., Hughes, E. H., and Gregory, P. W. 1940. Studies on genetic resistance in swine to Brucella infection. Prelim. Rpt. The Cornell Vet. 30:218-222. (ABA 9:134-135).

Castillo, A. E. 1940. Studies on correlation between certain characters of Berkjala sows and the size of their litters. Phil. Agr. 29:48-54. ABA 10:109.

1940

- Craft, W. A. 1940. Swine breeding in the Corn Belt. J. Hered. 31:207-208. (ABA 8:264).
- Crampton, E. W. 1940. Hog carcass studies; effect of early rate of growth on leanness of carcass. Sci. Agr. 20:592-595. (ABA 8:390).
- Donald, H. P. 1940. Breeding policy in relation to performance-testing of pigs. Emp. J. Expt. Agr. 8(31):185-189. (ABA 9:32).
- Donald, H. P. 1940. Growth rate and carcass quality in bacon pigs. A study of polynomial coefficients fitted to growth rate data. J. Agr. Sci. 30:582-597. (ABA 9:32).
- Downey, L. A. 1940. Pig breeding. Market requirements. J. Dept. Agr. Vict. 38:80-82. (ABA 9:132).
- Hankins, O. G. 1940. A study of carcass characteristics in relation to type of hog. Rec. Proc. 33rd Annu. Meet. Amer. Soc. Anim. Prod. Nov. 29-Dec. 1, 1940. pp. 284-289. (ABA 10:110).
- Headley, F. B. 1940. Purebred and crossbred pigs. Comparison of rate of growth and economy of gains. U. Nev. Agr. Expt. Sta. B. 153. (ABA 10:39).
- *Hetzer, H. O., and Brier, G. W. 1940. Extent to which type differences among swine affect litter size. Rec. Proc. 33rd Annu. Meet. Amer. Soc. Anim. Prod. Nov. 29-Dec. 1, 1940. pp. 135-138. (ABA 10:113).
- *Hetzer, H. O., Lambert, W. V., and Zeller, J. H. 1940. Influence of inbreeding and other factors on litter size in Chester White Swine. USDA Cir. 570. (ABA 10:41).
- Hiner, R. L., and Hankins, O. G. 1940. Growth and development in the pig, with special reference to carcass quality characters. I-II. J. Agr. Sci. 30:511-569.
- Johnson, C. D. 1940. Deformed pigs. Life 9(12):94. (ABA 8:392).
- Johnson, Leslie, E. 1940. Streamlined pigs. A new legless mutation. J. Hered. 31:239-242. (ABA 8:268).
- Kim, M. M., and Titova, M. I. 1940. The basal metabolism of growing pigs of the Large White Breed from 10 days to 10 months of age. Eng. Sum. Vestn. seljskhoz. Nauki Zivotn. 2:128-136. (ABA 10:241).

1940

- Kozenko, T. M. 1940. Storing the sperm of the boar. Eng. Sum. Vestn. seljskohoz. Nauki Zivotn. 4:106-118. (ABA 10:175).
- Lambert, W. V. 1940. Terminology to describe the progeny from various systems of breeding. Rec. Proc. 33rd Annu. Meet. Amer. Soc. Anim. Prod. Nov. 29-Dec. 1, 1940. p. 378.
- Lambert, W. V., and McKenzie, F. F. 1940. Artificial insemination in livestock breeding. USDA Cir. 567.
- Lasley, J. F. 1940. Artificial insemination of swine and storage of boar semen. M.A. Thesis. U. of Mo. Columbia.
- *Lush, Jay L. 1940. Intra-sire correlations or regressions of offspring on dam as a method of estimating heritability of characteristics. Rec. Proc. 33rd Annu. Meet. Amer. Soc. Anim. Prod. Nov. 29-Dec. 1, 1940. pp. 293-301.
- *Lush, Jay L. 1940. Linebreeding. Iowa Agr. Expt. Sta. B. 301.
- Lush, Jay L. 1940. Relative importance of dam's productivity, pig's own market score, and pig's own growth rate in selecting young boars and gilts for breeding. Reg. Swine Breed. Lab. Res. Item 18. Sept. 19, 1940. Ames.
- Lush, J. L., Shearer, P. S., and Culbertson, C. C. 1940. Crossbreeding hogs for pork production. Iowa Agr. Expt. Sta. B. 380.
- Lyon, B. M. 1940. Factors limiting swine production. J. Amer. Vet. Med. Assoc. 96:495-500. (ABA 9:34).
- Mallari, A. I., and Farinas, E. C. 1940. Preliminary observations on Spotted Poland China as compared with Black Poland China, Duroc-Jersey, and Berkshire pigs. Phil. J. Anim. Indus. 7:439-447. (ABA 9:32).
- Marsh, T. D. 1940. Pig keeping in Malaya. Malay Agr. J. 28:3-20. 4 plts. (ABA 8:143).
- McMeekan, C. P. 1940. Growth and development in the pig with special reference to carcass quality characters. General. J. Agr. Sci. 30(2):276-291. (ABA 9:34).
- McMeekan, C. P. 1940. Growth and development in the pig with special reference to carcass quality characters. I. Age changes in growth and development. J. Agr. Sci. 30(2):292-343. (ABA 9:34).

1940

- McMeekan, C. P. 1940. Growth and development in the pig with special reference to carcass quality characters. II. The influence of the plane of nutrition on growth and development. J. Agr. Sci. 30(3):387-436. (ABA 9:34).
- McMeekan, C. P. 1940. Growth and development in the pig with special reference to carcass quality characters. III. Effect of the plane of nutrition on the form and composition of the bacon pig. J. Agr. Sci. 30(4):511-569. (ABA 9:34).
- McMeekan, C. P., and Hammond, J. 1940. The relation of environmental conditions to breeding and selection for commercial types in pigs. Emp. J. Expt. Agr. 8(29):6-10. (ABA 8:393).
- *Molln, Arthur E. 1940. Litter and line differences in some weights and scores of pigs. Rec. Proc. 33rd Annu. Meet. Amer. Soc. Anim. Prod. Nov. 29-Dec. 1, 1940. pp. 132-135. (ABA 10:110).
- Pomeroy, R. W. 1940. Review of the N.P.A. bacon carcass competition 1932-37. Pig Breed Annu. 19:23-29. 1939-40. (ABA 7:329).
- Reinmiller, Cletus F. 1940. Carcass score as predicted by measurements and observations. Reg. Swine Breed. Lab. Res. Item 16. Jan. 23, 1940. Ames.
- Roberts, E., and Carroll, W. E. 1940. A study of hybrid vigor in a cross between Poland China and Duroc Jersey swine. J. Agr. Res. 59:847-854.
- Russell, E. Z. 1940. Age as a factor in brood sow performance. USDA Bur. Anim. Ind. AHD. Mimeo.
- Shepherd, G., Beard, F. J., and Erikson, A. 1940. Could hogs be sold by carcass weight and grade in the United States? Iowa Agr. Expt. Sta. Res. B. 270:445-506. (ABA 13:40).
- Shorrock, R. W. 1940. Coordinated experiments in pig husbandry. Emp. J. Expt. Agr. 8:159-167. (ABA 8:394).
- Starkey, L. V. 1940. Purebred versus crossbred pigs. S. C. Agr. Expt. Sta. Annu. Rpt. 53. p. 77.
- Walton, A., Edwards, J., and Hammond, J. 1940. Fertility in farm animals. J. Roy. Agr. Soc. Eng. 100(3):1-12.
- Weaver, L. A. 1940. Crossbreeding of swine. Mo. Agr. Expt. Sta. B. 413.

1940

- Wells, W., Beeson, W. M., and Brady, D. E. 1940. Frequency of nursing and number of pigs influences milk production in the sow. Idaho Agr. Expt. Sta. B. 236.
- Williams, S. 1940. Pig breeding in war time. Trans. Yorks. Agr. Soc. 1939. 97:48-53. (ABA 8:266).
- Winters, L. M. 1940. A record of performance for meat animals. Emp. J. Expt. Agr. 8(32):259-268.
- Zeller, J. H., 1940. Swine type as a factor in pork production. Rec. Proc. 33rd Annu. Meet. Amer. Soc. Anim. Prod. Nov. 29-Dec. 1, 1940. pp. 279-283. (ABA 10:112).
- Zuckerman, S., and Groome, J. R. 1940. An experimental study of the morphogenesis of intersexuality. J. Anat. (Lond.) 74:171-200. (ABA 8:399).

1941

- Altmann, M. 1941. A study of patterns of activity and neighborly relations in swine. J. Comp. Psychol. 31:473-479.
- Altmann, M. 1941. Interrelations of the sex cycle and the behavior of the sow. J. Comp. Psychol. 31:481-498. (ABA 10:242).
- *Asdell, S. A., and Willman, J. P. 1941. The causes of stillbirth in swine and an attempt to control it. J. Agr. Res. 63(6):345-353. (ABA 10:112-113).
- Bague, J. 1941. Breeding and rearing of purebred swine in Puerto Rico. Res. B. on Agr. & Livestk. San Juan, Gov't of P. R. Dept. of Agr. & Commerce. 127 pp. (ABA 11:239).
- *Berge, S. 1941. The inheritance of paralysed hind legs, scrotal hernia, and atresia ani in pigs. J. Hered. 32:271-274. (ABA 10:40-41).
- Berge, S. 1941. Three hereditary anomalies in pigs. Hereditas. 27:176-192. (ABA 10:40).
- Cameron, H. S., Gregory, P. W., and Hughes, E. H. 1941. Studies on genetic resistance in swine to Brucella infection. II. A bacteriological examination of resistant stock. The Cornell Vet. 31:21-34. (ABA 9:134).
- Bogert, R., Muhrer, M. E., and Hogan, A. J. 1941. A hemophilia-like disease in swine. Proc. Soc. Expt. Biol. and Med. 48:217-219.

1941

- Craft, W. A. 1941. Breed building and maintenance. Pol. China J. Aug. pp. 22-27.
- Dickerson, G. E. 1941. Experimental design for testing inbred lines of swine. Reg. Swine Breed. Lab. Res. Item 23. Sept. 3, 1941. Ames.
- Donald, H. P. 1941. Length of life and interval between generations in the Large White breed of pig. Emp. J. Expt. Agr. 9(36):236-247. (ABA 10:109).
- Edwards, J., Walton, A., and Hammond, J. 1941. Heredity in farm animals. J. Roy. Agr. Soc. Eng. 101(2):1-16. (ABA 11:6).
- Hammond, J., Edwards, J., and Walton, A. 1941. Animal breeding in relation to environmental conditions. J. Roy. Agr. Soc. Eng. 102:156-170.
- Hammond, John. 1941. Fertility in mammals and birds. Biol. Rev. 16:165-190.
- Hazel, L. N. 1941. Principles of a selection index which involves several characteristics and utilizes information concerning relatives. Ph.D. Thesis. Iowa State Col. Libr. Ames.
- Hetzer, H. O. 1941. Market grade as influenced by certain points of conformation and weight. Reg. Swine Breed. Lab. Res. Item 21. Apr. 2, 1941. Ames.
- Hetzer, H. O. 1941. Reproductive efficiency of sows at first service in relation to reproductive efficiency at subsequent services. Reg. Swine Breed. Lab. Res. Item 20. Jan. 2, 1941. Ames.
- Hiner, R. L., and Hankins, O. G. 1941. Use of the pentrometer for determining the firmness of fatty tissue of hog carcasses. J. Agr. Res. 63:233-240. (ABA 10:111).
- Hogan, A. G., Muhrer, M. E., and Bogart, R. 1941. A hemophilia-like disease in swine. Proc. Soc. for Expt. Biol. & Med. 48: 217-219. (ABA 10:174).

1941

- Johns, A. T. 1941. The influence of sex upon the composition of the fat of the pig. New Zeal. J. Sci. Tech. (Agr.) 22:248A-258A. (ABA 10:39).
- Lush, Jay L., Shearer, P. S., and Culbertson, C. C. 1941. Cross-breeding hogs? Farm Sci. Rptr. pp. 8-11. Jan.
- McMeekan, C. P. 1941. Growth and development in the pig with special reference to carcass quality characters. IV. The use of sample joints and of carcass measurements as indices of the composition of the bacon pig. J. Agr. Sci. 31(1):1-17. (ABA 9:34).
- McMeekan, C. P. 1941. Growth and development in the pig with special reference to carcass quality characters. V. The bearing of the main principles emerging upon the many problems of animal production and human development. J. Agr. Sci. 31(1):17-49. (ABA 9:34).
- Moskovits, I. 1941. Bounties granted in Germany for the surrender of criptorchid (sic) boars. Int. Rev. Agr. 32:403T. (ABA 12:90).
- Nelson, Ronald H. 1941. The influence of heredity on the market score of Duroc Jersey hogs. M.S. Thesis. Okla. State U. Libr. Stillwater.
- Nielsen, W. M. 1941. Hermaphroditism in a pig. Vet. Med. 36:111. (ABA 10:42).
- Olbrycht, T. M. 1941. Colour variation in Wessex Saddleback pigs and its relation to the conformation and the economic usefulness of the breed. B. Natl. Pig Breed. Assoc. 2. (ABA 10:41-42).
- Olbrycht, T. M. 1941. Statistical analysis of black colour in Wessex Saddleback breed. Ann. Eugenics. 11:80-88. (ABA 10:143).
- Phillips, Ralph W., and Zeller, John H. 1941. Some factors affecting fertility in swine. Amer. J. Vet. Res. 2(5):439-442. (ABA 10:175).
- Pomeroy, R. W. 1941. The effect of a submaintenance diet on the composition of the pig. J. Agr. Sci. 31(1):50-73. (ABA 10:40).
- Ritzman, E. G., and Colovos, N. F. 1941. Traits that determine the efficiency of the pig as a transformer of energy. Tech. B. N. H. Agr. Expt. Sta. 75:29 pp. (ABA 10:172).

1941

- Robinson, K., and Lees, D. H. K. 1941. Reactions of the pig to hot atmospheres. Proc. Roy. Soc. Qd. 53:145. (ABA 11:238).
- Roth, S. Y., Mayer, D. T., Bogart, Ralph. 1941. Pregnancy diagnosis in swine by a chemical test. Amer. J. Vet. Res. 2(5): 436-438. (ABA 10:175).
- Smith, R. O. 1941. Indications of lean content of pork carcasses. M.S. Thesis. Iowa State Col. Libr. Ames.
- Stonaker, H. H. 1941. Heritability of differences in the type of individual swine as evaluated by scores. M.S. Thesis. Iowa State Col. Libr. Ames.
- Whatley, J. A., Jr. 1941. A study on the repeatability of certain body measurements on the same pig. Reg. Swine Breed. Lab. Res. Item 22. Apr. 25, 1941. Ames.
- Willham, O. S., and Whatley, J. A., Jr. 1941. The improvement of swine through the use of moderate inbreeding and selection. Okla. Agr. Expt. Sta. Cir. 69. Mimeo.
- Winchester, C. F., and McKenzie, F. F. 1941. Relative metabolic rates of semen, seminal plasma, and bacteria in semen of the boar. Proc. Soc. Expt. Biol. (N.Y.) 46:455-458. (ABA 9:233).
- Winkler, C. A. 1941. Canadian Wiltshire Bacon. XXII. Comparative carcass quality of Canadian and Danish Bacons. Canad. J. Res. Sect. D. Zool. Sci. 19:233-239.
- Woodman, H. E., and Evans, R. E. 1941. The nutrition of the bacon pig. VI. The minimum level of protein intake consistent with quick growth and satisfactory carcass quality. J. Agr. Sci. 31:232-245.

1942

- Baker, M. L., and Reinmiller, C. F. 1942. A study of certain trends in inbred lines of swine. (Abs.) J. Anim. Sci. 1:69. (ABA 12:91).

1942

- Bogart, R., and Muhrer, M. E. 1942. The inheritance of a hemophilia-like condition in swine. J. Hered. 33:59-64. (ABA 10:174).
- Bogart, R., Muhrer, M. E., and Hogan, A. J. 1942. The physiology and inheritance of a hemophilia-like abnormality in swine. (Abs.) Genet. 27:133.
- Cameron, H. S., Gregory, P. W., and Hughes, E. H. 1942. Genetic resistance to brucellosis in swine. (Abs.) J. Anim. Sci. 1:87-88.
- Cameron, H. S., Hughes, E. H., and Gregory, P. W. 1942. Genetic resistance to brucellosis in swine. J. Anim. Sci. 1:106-110. (ABA 10:174).
- *Carroll, W. E., and Roberts, E. 1942. Crossbreeding in swine. Does it offer an effective method for the improvement of market hogs. Ill. Agr. Expt. Sta. B. 489:123-136. (ABA 11:242).
- Chow, B. F., Van Dyke, H. B., Greep, R. O., Rothen, A., and Shedlovsky, T. 1942. Gonadotropins of the swine pituitary. II. Preparation, and biological and physico-chemical characterization of a protein apparently identical with metakentrin (ICSH). Endocrinol. 30:650-656. (ABA 11:178).
- Chow, B. F. 1942. Gonadotropins of the swine pituitary. III. Immunological specificity of swine metakentrin. Endocrinol. 30:657-661. (ABA 11:178).
- *Comstock, R. E., and Winters, L. M. 1942. Design of experimental comparisons between lines of breeding in livestock. J. Agr. Res. 64(9):523-532. (ABA 10:199).
- Comstock, R. E., Winters, L. M., and Cummings, J. N. 1942. The effect of sex on the development of the pig. III. Differences in growth rate between males and females by lines of breeding. (Abs.) J. Anim. Sci. 1:358.
- *Comstock, R. E., Winters, L. M., Jordan, P. S., and Kiser, O. M. 1942. Measures of growth rate for use in swine selection. J. Agr. Res. 65(8):379-389. (ABA 11:175).
- Craft, W. A. 1942. Must breed better hogs. (Part I). Pol. China J. June. pp. 6-7.
- Craft, W. A. 1942. Organization and development of the Regional Swine Breeding Laboratory. (Abs.) J. Anim. Sci. 1:68-69.

1942

- Dickerson, G. E. 1942. Experimental design for testing inbred lines of swine. (Abs.) J. Anim. Sci. 1:88-89.
- *Dickerson, G. E. 1942. Experimental design for testing inbred lines of swine. J. Anim. Sci. 1:326-341. (ABA 11:111).
- Dickerson, G. E., and Hazel, L. N. 1942. Effect of progeny testing on progress from selection within closed herds. (Abs.) J. Anim. Sci. 1:342. (ABA 13:68).
- Dickerson, G. E., and Hazel, L. N. 1942. Selection for growth rate and productivity in closed herds of swine. (Abs.) J. Anim. Sci. 1:342.
- Donald, H. P., and Auerbach, C. 1942. The duration and extent of pedigree breeding in herds of large white pigs as factors in breed improvement. Emp. J. Expt. Agr. 10(40):232-244. (ABA 11:172).
- Dore, V. 1942. Distribution of pigs according to age, sex and destination. Int. Rev. Agr. 33:281S-290S. (ABA 12:32).
- Downey, L. A. 1942. A study of pig litter records. J. Dept. of Agr. Vict. 40:202-203. (ABA 10:241-242).
- Dunlop, G., and West, A. 1942. The effect of season on the fattening of swine at various stages of growth. Rmp. J. Expt. Agr. 10:161-168. (ABA 11:37).
- Elijah, H. D., and Turner, C. W. 1942. The weight and thyrotropic hormone content of the anterior pituitary of swine. Res. B. Mo. Agr. Expt. Sta. 357. (ABA 11:241).
- Giles, D. D. 1942. An experiment to determine the effect of the growth hormone of the anterior lobe of the pituitary gland on swine. Amer. J. Vet. Res. 3:77-85. (ABA 10:171).
- Green, W. W., Rash, J. R., Jr., and Dailey, D. L. 1942. The effect of sex on the development of the pig. II. Studies of sex hormone differences between lines. (Abs.) J. Anim. Sci. 1:89.
- *Green, W. W., Winters, L. M., Rash, J. R., Jr., and Dailey, D. L. 1942. The effect of sex on the development of the pig. II. Urinary excretion of androgens by boars of different lines of breeding. J. Anim. Sci. 1:111-115. (ABA 10:175).
- Greep, R. O., Van Dyke, H. B., and Chow, B. F. 1942. Gonadotropins of the swine pituitary. I. Various biological effects of purified thyliakentrin (FSH) and pure metakentrin (ICSH). Endocrinol. 30:635-649. (ABA 11:178).

1942

- Guilbert, H. R. 1942. Some endocrine relationships in nutritional reproductive failure (a review). *J. Anim. Sci.* 1:3-13.
- Hallqvist, C. 1942. The individuality of sows in regard to size of litters. *Hereditas* 28:127-135. (ABA 11:111).
- Hammond, J., Edwards, J., and Walton, A. 1942. Animal breeding in relation to environmental conditions. *J. Roy. Soc. Eng.* 102:1-15.
- Hazel, L. N., Baker, M. L., and Reinmiller, C. F. 1942. Genetic and environmental correlations between the growth rates of pigs at different ages. (Abs.) *J. Anim. Sci.* 1:358-359.
- Hazel, L. N., and Lush, J. L. 1942. Constructing selection indexes to make maximum progress. (Abs.) *J. Anim. Sci.* 1:69-70.
- *Hazel, L. N., and Lush, J. L. 1942. The efficiency of three methods of selection. *J. Hered.* 33:393-399. (ABA 11:142).
- Hetzer, H. O. 1942. Differences in mothering and nursing ability of sows as a cause of differences in some weights of their pigs. (Abs.) *J. Anim. Sci.* 1:71. (ABA 12:90).
- Lozinski, E., Holden, G. W., and Macallum, E. N. 1942. On the excretion of oestrogens and gonadotropic hormone in the urine and concentration of gonadotropic hormone in the serum of the pregnant sow. *Rev. Canad. Biol.* 1:677-684. (ABA 12:35).
- Lush, Jay L. 1942. Results to be expected from selection on a family basis. (Abs.) *J. Anim. Sci.* 1:342-343. (ABA 13:69).
- *Lush, Jay L., and Molln, A. E. 1942. Litter size and weight as permanent characteristics of sows. *USDA Tech. B.* 836. (ABA 11:242).
- McPhee, H. C., and Eaton, O. N. 1942. Experimental attempts to modify the sex ratio in rabbits and pigs. (Abs.) *J. Anim. Sci.* 1:343.
- McPhee, H. C., and Eaton, O. N. 1942. Experimental attempts to modify the sex ratio in rabbits and pigs. *J. Hered.* 33:429-433. (ABA 11:202).
- Mertz, E. T. 1942. Abnormal capillary resistance in swine suffering from an inherited breeding disease. *Amer. J. Physiol.* 138:136-139. (ABA 11:111).

1942

- Mertz, E. T. 1942. The anomaly of a normal Duke's and a very prolonged saline bleeding time in swine suffering from an inherited bleeding disease. Amer. J. Physiol. 136:360-362. (ABA 14:96).
- Molln, A. E. 1942. The relation between growth rates, weights, and scores for pigs at market maturity. (Abs.) J. Anim. Sci. 1:359-360. (ABA 13:96).
- Molln, A. E. 1942. Relations between scores and growth rate in pigs. Reg. Swine Breed. Lab. Res. Item 24. June 2, 1942. Ames.
- Muhrer, M. E., Hogan, A. G., and Bogart, R. 1942. A defect in the coagulation mechanism of swine blood. Amer. J. Physiol. 136:355-359. (ABA 14:96).
- Phillips, R. W., and Zeller, J. H. 1942. Sexual development in large and small type Poland China Hogs. (Abs.) J. Anim. Sci. 1:89-90.
- Rosenfeld, B. 1942. A swine-breeding research farm. Vet. Med. 37:199-201. (ABA 10:174).
- Ross, O. B., Phillips, P. H., and Bohstedt, G. 1942. The effect of a simplified diet upon reproduction and lactation in swine and in the rat. (Abs.) J. Anim. Sci. 1:86.
- Steel, N. A. 1942. Production of pig meats. Type, quality and uniformity are essential. Agr. Gaz. N. S. W. 53:315-317. (ABA 11:38).
- *Stonaker, H. H., and Lush, J. L. 1942. Heritability of conformation in Poland China swine as evaluated by scoring. J. Anim. Sci. 1:99-105. (ABA 10:174-175).
- Thompson, J. D. 1942. Comparative studies on gonad development in the rat, the pig, and in cattle. Proc. Iowa Acad. Sci. 49:475-501. (ABA 12:5).
- *Whatley, J. A., Jr. 1942. Influence of heredity and other factors on 180-day weight in Poland China swine. J. Agr. Res. 65(5):249-264. (ABA 11:111).
- Whatley, J. A., Jr., and Nelson, R. H. 1942. Heritability of differences in 180-day weight and market score of Duroc swine. (Abs.) J. Anim. Sci. 1:70.

1942

Winters, L. M., Comstock, R. E., and Dailey, D. L. 1942. The development of an inbred line of swine from a crossbred foundation. (Abs.) J. Anim. Sci. 1:360.

Winters, L. M., Comstock, R. E., Jordan, D. F., and Kiser, O. M. 1942. The effect of sex on the development of the pig. Differences in growth (rate and body measurements) between boars and barrows by lines of breeding. (Abs.) J. Anim. Sci. 1:70-71.

*Winters, L. M., Comstock, R. E., Jordan, D. F., and Kiser, O. M. 1942. The effect of sex on the development of the pig. I. Differences in growth between boars and barrows by lines of breeding. J. Anim. Sci. 1:41-47. (ABA 10:175-176).

1943

Anon. 1943. Crossbred swine. Minn. Agr. Expt. Sta. B. 180.

Anon. 1943. "Thick forelegs" in newly born pigs. N. Amer. Vet. 24:419. (ABA 12:206).

Ashton, G. C., and Crampton, E. W. 1943. Rates of growth of bacon-type nursing pigs. Sci. Agr. 24:17-20. (ABA 12:91).

Ashton, G. C., and Crampton, E. W. 1943. Growth and feed consumption of bacon hogs. II. Rates of gain and feed consumption according to weight of pig. Sci. Agr. 23:588-692. (ABA 12:146-147).

*Baker, M. L., Hazel, L. N., and Reinmiller, C. F. 1943. The relative importance of heredity and environment in the growth of pigs at different ages. J. Anim. Sci. 2:3-13. (ABA 11:176).

Bean, H. W. 1943. Single weight versus a three-day average weight for swine. (Abs.) J. Anim. Sci. 2:373. (ABA 14:95).

Bushnell, R. J. 1943. Linked color factors in the Hampshire swine. J. Hered. 34:302-307. (ABA 12:91-92).

Cameron, H. S., Gregory, P. W., and Hughes, E. H. 1943. Inherited resistance to brucellosis in inbred Berkshire swine. Amer. J. Vet. Res. 4:387-389. (ABA 12:35).

1943

- Clare, N. T. 1943. Congenital porphyria in pigs. Proc. New Zeal. Soc. Anim. Prod. 3rd Annu. Conf. 1943: 66-70. (ABA 13:41).
- Comstock, R. E., Green, W. W., Winters, L. M., and Nordskog, A. W. 1943. Studies of semen and semen production. Minn. Tech. B. 162.
- Comstock, R. E., and Winters, L. M. 1943. A comparison of the effects of inbreeding and selection on performance in swine. (Abs.) J. Anim. Sci. 2:356-357.
- Craft, W. A. 1943. America's debt to the hog. Duroc News. Oct. pp. 14, 92, 93, 95, 96, 97.
- *Craft, W. A. 1943. Swine breeding research at the Regional Swine Breeding Laboratory. USDA MP-523. (ABA 12:92).
- Cullity, M. 1943. The pig industry. Carcass quality. West. Austral. Dept. Agr. J. (ser.2) 20(1):28-34.
- Dickerson, G. E. 1943. Changes in hog carcasses associated with genetic superiority in economy of gain. (Abs.) J. Anim. Sci. 2:357. (ABA 14:95).
- Dickerson, G. E., McClurg, B. R., and Beard, F. J. 1943. Relation between carcass conformation and value of live hogs. (Abs.) J. Anim. Sci. 2:373-374. (ABA 14:94).
- Durrell, W. B. 1943. Hypo-pituitarism in sows. Canad. J. Comp. Med. 7:162.
- Fairbanks, B. W., Roberts, E., and Carroll, W. E. 1943. Breeding for rate of gain with swine. A progress report. (Abs.) J. Anim. Sci. 2:374-375. (ABA 14:95).
- Green, W. W., and Winters, L. M. 1943. The effect of sex on the development of the pigs. IV. Histological and endocrinological studies of the boar. (Abs.) J. Anim. Sci. 2:358.
- Hankins, O. G., and Ellis, N. R. 1943. The chemical composition and the nutritive value of the dressed carcass and cuts in relation to live weight of hogs of intermediate type. USDA - ARA - Bur. Anim. Ind. AHD 67. (Mimeo). Oct.
- Hankins, O. G., and Hiner, R. L. 1943. The physical composition of the dressed carcass and cuts in relation to live weight of the hog of the intermediate type. USDA - ARA - Bur. Anim. Ind. June. (Mimeo).

1943

- *Hazel, L. N. 1943. The genetic basis for constructing selection indexes. Genet. 28:476-490. (ABA 12:175).
- *Hazel, L. N., Baker, M. L., and Reinmiller, C. F. 1943. Genetic and environmental correlations between the growth rates of pigs at different ages. J. Anim. Sci. 2:118-128. (ABA 11:177).
- Hazel, L. N., Reinmiller, C. F., and Baker, M. L. 1943. The relationship between growth rate and carcass measurements in swine. (Abs.) J. Anim. Sci. 2:375-376.
- Hetzer, H. O., and Zeller, J. H. 1943. Heritability of type in Poland China swine as evaluated by scoring. (Abs.) J. Anim. Sci. 2:375.
- Hetzer, H. O., and Eaton, O. N. 1943. A case of conjoined twins in the pig. Anat. Rec. 87:53-65. (ABA 12:147).
- Kenneth, J. H. 1943. Gestation periods. A table and bibliography. Imper. Bur. Anim. Breed. Genet. Edinburgh. Oliver and Boyd Ltd. London.
- Loeffel, W. J., Derrick, W. W., and Peters, M. 1943. Weight of pigs as it affects gains and carcass qualities. Nebr. Agr. Expt. Sta. B. 351. (ABA 12:205).
- Lush, J. L., and Kincaid, C. M. 1943. Adjusting weights of pigs to an age of 154 days. Reg. Swine Breed. Lab. Res. Item 25. Apr. 15, 1943. Ames.
- Marcuse, F. L. 1943. Experimental studies of physiological patterns in normal and abnormal animal behavior. Cornell U. Thesis. (Abs.) 1942:309-311.
- Mertz, E. T., and Hensel, L. A. 1943. A blood vessel defect in swine suffering from an inherited bleeding disease. Amer. J. Physiol. 139:117-122. (ABA 12:35).
- Nordskog, A. W. 1943. A study of factors affecting selection for rate of growth in swine. Ph.D. Thesis. U. Minn. Libr. St. Paul.
- Olbrycht, T. M. 1943. The statistical basis of selection in animal husbandry. I. Studies on life performance of brood sows: An analysis of variance and covariance of progeny born and reared. J. Agr. Sci. 33(1):28-43. (ABA 11:241).

1943

- Olbrycht, T. M. 1943. The statistical basis of selection in animal husbandry. II. The judging of brood sows by their number of offspring born and reared in the earliest litters. J. Agr. Sci. 33:74-84. (ABA 11:241).
- Perotti, J. M. 1943. Mean improvement in a normal variate under direct and indirect selection. M.S. Thesis. Iowa State Col. Libr. Ames.
- *Phillips, R. W., and Zeller, J. H. 1943. Sexual development in small and large types of swine. Anat. Rec. 85(4):387-400. (ABA 11:243). 17(8):3,8-9.
- Rice, V. A. 1943. Stepping stones to breed progress. Duroc News/Sanderson, C. J. 1943. Hernia among growing pigs. Hog Breeder 18(8):40.
- Tannor, B., Clark, N. G., and Hankins, O. G. 1943. Mechanical determination of the juiciness of meat. J. Agr. Res. 66:403-412.
- *Warwick, E. J., Chapman, A. B., and Ross, B. 1943. Some anomalies in pigs. J. Hered. 34:349-352. (ABA 12:92).
- Watson, C. J., Campbell, J. A., Davidson, W. M., Robinson, C. H., and Muir, G. W. 1943. Digestibility studies with swine. I. The digestibility of grains and concentrates at different stages of the growing and fattening period. Sci. Agr. 23:708-724.
- *Weaver, L. A., and Bogart, R. 1943. Some factors influencing efficient production of sows. Mo. Agr. Expt. Sta. B. 461. (ABA 12:91).
- Willman, J. P., and Krider, J. L. 1943. A study of the characteristics of live market hogs as related to the quality of carcasses produced. J. Anim. Sci. 2:231-236. (ABA 12:34).
- *Winters, L. M., Comstock, R. E., and Dailey, D. L. 1943. The development of an inbred line of swine (Minn. No. 1) from a crossbred foundation. J. Anim. Sci. 2:129-137. (ABA 11:177).
- *Winters, L. M., Comstock, R. E., Kiser, O. M., Hodgson, R. E., Jordan, P. S., and Dailey, D. L. 1943. Experiments with inbreeding swine and sheep. Minn. Agr. Expt. Sta. B. 364. (ABA 11:242).

1943

Winters, L. M., Kiser, O. M., Jordan, P. S., and Peters, W. H. 1943. You will find greater profits with crossbred swine. (Rev.) Minn. Agr. Expt. Sta. Spec. B. 180.

Woodcock, A. H. 1943. Colour of meat. IV. Measurement of the colour of bacon. Canad. J. Res. Sect. D. Zool. Sci. 21:90-97.

1944

Barker, C. A. V. 1944. Treatment of anoestrous of sows with diethylstilbesterol. Canad. J. Comp. Med. 8:11-13. (ABA 12:92).

Berge, S. 1944. Genetical researches of the number of vertebrae in the pig. Inst. Anim. Breed and Genet. Agr. Col. Norway. Rpt. 22(24):1-68.

*Brody, S., and Kibler, H. H. 1944. Growth and development. LIX. Resting energy metabolism and pulmonary ventilation in swine. Mo. Agr. Expt. Sta. Res. B. 380.

Brown, C. E. 1944. Lateral hermaphroditism (dynadromorphism) in a pig. Vet. Med. 39:456-457. (ABA 13:152).

Clare, N. T., and Stephens, E. H. 1944. Congenital porphyria in pigs. Nature 153:252-253. (ABA 12:92).

*Comstock, R. E., and Winters, L. M. 1944. A comparison of the effects of inbreeding and selection on performance in swine. J. Anim. Sci. 3:380-389. (ABA 13:96).

*Comstock, R. E., and Winters, L. M. 1944. The development of body form in swine. J. Anim. Sci. 3:188-193. (ABA 12:147).

*Comstock, R. E., Winters, L. M., and Cummings, J. N. 1944. The effect of sex on the development of the pig. III. Differences in growth rate between gilts and barrows by lines of breeding. J. Anim. Sci. 3:120-128. (ABA 12:147).

Craft, W. A., and Caine, A. B. 1944. Objectively naming purebred animals. Pol. China World. May.

Cunha, T. J., Ross, O. B., Phillips, P. H., and Bohstedt, G. 1944. Further observations on the dietary insufficiency of a corn-soybean ration for reproduction of swine. J. Anim. Sci. 3:415-421. (ABA 13:40).

*Dickerson, G. E., and Hazel, L. N. 1944. Effectiveness of selection on progeny performance as a supplement to earlier culling in livestock. J. Agr. Res. 69:459-476. (ABA 13:123).

1944

- *Dickerson, G. E., and Hazel, L. N. 1944. Selection for growth rate of pigs and productivity of sows. J. Anim. Sci. 3:201-212. (ABA 12:205-206).
- Dickerson, G. E., Lush, J. L., and Culbertson, C. C. 1944. Hybrid vigor in first crosses between inbred lines of swine. (Abs.) J. Anim. Sci. 3:454.
- Dickerson, G. E., McClurg, B. R., and Beard, F. J. 1944. Relation of carcass conformation to value of live hogs. Reg. Swine Breed. Lab. Res. Item 26. Oct. 31, 1944. Ames.
- Downey, L. A. 1944. Pig breeding. Market requirements. J. Dept. Agr. Vict. 42:197-206. (ABA 14:29).
- Fairbanks, B. W., Roberts, Elmer and Carroll, W. E. 1944. Quick maturity (swine breeding experiment). Hog Breeder 14(1):9.
- Fishwick, V. C. 1944. Rearing and the breeding capacity of pigs. J. Min. Agr. 51:41-43. (ABA 12:90).
- Green, W. W. 1944. Urine excretion by boars. Amer. J. Vet. Res. 5:337-340. (ABA 13:152).
- Green, W. W., and Winters, L. M. 1944. Histological studies of boar testes. J. Morph. 75(2):291-301. (ABA 13:212).
- Green, W. W., and Winters, L. M. 1944. The effect of sex on the development of the pig. IV. Histological and endocrinological studies of the boar. J. Anim. Sci. 4:55-62.
- Grimes, J. C. 1944. Selecting for increased efficiency... Alabama Agricultural Experiment Station reduces feed requirement for 100 lbs. gain from 386 to 334 in sixth generation (of Duroc swine). Duroc News 18(10):132-133.
- Hammond, J. 1944. Inbreeding and line-breeding. Min. Agr. 51:213-215. (ABA 13:4).
- Hetzer, H. O., and Zeller, J. H. 1944. Heritability of type in Poland China swine as evaluated by scoring. Hog Breeder 14(1):122, 124.
- *Hetzer, H. O., Dickerson, G. E., and Zeller, J. H. 1944. Heritability of type in Poland China swine as evaluated by scoring. J. Anim. Sci. 3:390-398. (ABA 13:96-97).

1944

- Hopper, R. M. 1944. Where do we go from here in pig breeding. .CSEA Rev. 43(4):15-19.
- Johnson, L. E. 1944. Differences in lengths of gestation periods of breeds of beef cattle, swine, and sheep. S. Dak. Acad. Sci. 24: 27-30. (ABA 14:5).
- Kernkamp, H. C. H. 1944. Pig mortality. U. S. Livestock Sanit. Assoc. Proc. (1943) 47:87-89.
- Krider, J. L., Fairbanks, B. W., and Carroll, W. E. 1944. Effect of diet on gestation and lactation performance. (Abs.) J. Anim. Sci. 3:447.
- Lasley, J. F., and Bogart, R. 1944. A comparative study of epididymal and ejaculated spermatozoa of the boar. J. Anim. Sci. 3:360-370. (ABA 13:42).
- Lasley, J. F., and Bogart, R. 1944. Some factors affecting the resistance of ejaculated and epididymal spermatozoa of the boar to different environmental conditions. Amer. J. Physio. 141:619-624. (ABA 13:42).
- Lefebvre, J. G. 1944. Comparison of carcasses of male and female pigs scored for advanced registry. Canad. Swine 6(4):17.
- Lerner, I. M. 1944. Lethal and sublethal characters in farm animals. J. Hered. 35:219-224. (ABA 12:175).
- Loeffel, W. J. 1944. Hog type and carcass quality. Poland China World 31(8):104-105.
- Lush, J. L. 1944. What does the future hold for inbred hogs? Amer. Hampshire Herdsman 20, i.e. 19(12):68-71.
- Lush, J. L. 1944. Are better hogs coming? Inbreeding experiments indicate that this may be a way to speed swine improvement. Farn Sci. Rptr. 5(2):3-6.
- Makino, S. 1944. The chromosome complex of the pig (*Sus scrofa*). Chromosome studies in domestic mammals. III. Cytologia. 13: 170-178. (ABA 17:540).
- Mayr, D. T., and Lasley, J. F. 1944. The factor in egg yolk affecting resistance and storage potentialities of mammalian spermatozoa. (Abs.) J. Anim. Sci. 3:433.
- Mercuse, F. L., and Moore, A. U. 1944. Tantrum behavior in the pig. J. Comp. and Physiol. Psychol. 37:233-241.

1944

- McMeekan, C. P., Peirson, H. M., Johnson, H. E., Kneebone, H., Merrit, F., and Anderson, J. D. 1944. New Zealand bacon pig judging standards. New Zeal. J. Sci. Tech. (Agr.) 26:157-170. (ABA 13:95).
- *Nordskog, A. W., Comstock, R. E., and Winters, L. M. 1944. The relationship between certain blood components and rate of growth in swine. J. Anim. Sci. 3:422-430. (ABA 13:41).
- *Nordskog, A. W., Comstock, R. E., and Winters, L. M. 1944. Hereditary and environmental factors affecting growth rate in swine. J. Anim. Sci. 3:257-272. (ABA 12:205).
- Olbrycht, T. M. 1944. Behaviour of some external characteristics in Essex pigs. J. Agr. Sci. 34(1):16-21. (ABA 12:147).
- Peirson, H. M. 1944. Baconer competitions; new standards for judging (carcasses). New Zeal. J. Agr. 69:209-212. (ABA 13:40).
- Phillips, R. W., and Hsu, T. Y. 1944. Chinese swine and their performance (compared with modern and crosses between Chinese and modern breeds). J. Hered. 35:365-379. (ABA 14:30).
- Reinhart, V. M. 1944. Intra-inguinal cryptorchidism in swine. Vet. Student 6:211-212.
- *Roberts, E., and Morrill, C. C. 1944. Inheritance and histology of wattles in swine. J. Hered. 35:149-151. (ABA 12:206).
- Robison, W. L. 1944. Crossing inbred lines of swine within a breed. (Abs.) J. Anim. Sci. 3:454-455. (ABA 15:262).
- Ross, O. B., Phillips, P. H., Bohstedt, G., and Cunha, T. J. 1944. Congenital malformation, syndactylism, talipes and paralysis agitans of nutritional origin in swine. J. Anim. Sci. 3:406-414.
- Shorland, F. B., Hansen, R., and Hogan, K. J. 1944. Studies on the fats of the bacon pig with reference to carcass quality. 1. Iodine value of the back fat under different conditions of feeding. Empire J. Expt. Agr. 12:103-119.
- Stewart, H. A. 1944. Non genetic factors affecting prolificacy in swine. (Abs.) J. Anim. Sci. 3:455.
- Stewart, H. A. 1944. A study of factors affecting selection for fertility in swine. Ph.D. Thesis. U. Minn. Libr. St. Paul.

1944

- Venn, J. A. J. 1944. Variations in the leucocyte count of the pig during the first twelve weeks of life. J. Compar. Path. and Ther. 54:172-178.
- Wallace, L. R. 1944. The influence of sex upon carcass quality and efficiency of food utilisation. Proc. New Zeal. Soc. Anim. Prod. 4th Annu. Conf. 1944. 64-72. (ABA 13:152).
- *Weaver, L. A., and Bogart, R. 1944. Variation in efficiency of hogs. Mo. Agr. Expt. Sta. Cir. 290. (ABA 14:243).
- *Willham, O. S. 1944. Hybrid vigor within a breed. Okla. Agr. Expt. Sta. Cir. 113. (Mimeo).
- Winters, L. M. 1944. Swine project speeds improvement. Minn. Farm & Home Sci. 1:10-11.
- *Winters, L. M., and Green, W. W. 1944. A study of the predictive value of scores on body conformation of pigs taken previous to final score. J. Anim. Sci. 3:399-405. (ABA 13:41).
- *Winters, L. M., Jordan, P. S., Hodgson, R. E., Kiser, O. M., and Green, W. W. 1944. Preliminary report on crossing of inbred lines of swine. J. Anim. Sci. 3:371-379. (ABA 13:97).
- *Zeller, J. H., and Hetzer, H. O. 1944. Influence of type of hog on production efficiency. USDA Cir. 698. (ABA 13:96).

1945

- Atkinson, L. J., and Klein, J. W. 1945. Feed consumption and marketing weight of hogs. USDA Tech. B. 894. (ABA 14:239).
- Brody, S. 1945. Bioenergetics and Growth. Reinhold Pub. Corp. N. Y.
- Buchanan, R. E. 1945. Cooperation in animal husbandry research. J. Anim. Sci. 4:87-95.
- Cameron, C. D. T., Ashton, G. C., Hilton, S. A., and Crampton, E. W. 1945. Growth of bacon type hogs. Sci. Agr. 25:854-859.
- Carroll, W. E. 1945. Reconversion in the hog industry; long-time program should be one of breeding and selection to develop a hog which will produce less lard. Amer. Hampshire Herdsman 20(10): 42, 82.

1945

- Chipault, J. R., Lundberg, W. O., and Burr, G. O. 1945. The chemical determination of tocopherols in animal fats: the stability of hog fats in relation to fatty acid composition and tocopherol contents. Arch. Biochem. 8:321-335.
- Craft, W. A. 1945. Improving farm livestock. Nebr. State Bd. Agr. Annu. Rpt. pp. 467-470.
- Craft, W. A. 1945. Research in the Regional Swine Breeding Laboratory. Iowa Vet. 16(3):8-10. May-June.
- Cummings, J. N., Winters, L. M., and Stewart, H. 1945. The heritability of some factors affecting productivity of brood sows. (Abs.) J. Anim. Sci. 5:389.
- Dickerson, G. E., and Grimes, J. C. 1945. Effectiveness of selection for efficiency of gain in Duroc Jersey swine. (Abs.) J. Anim. Sci. 5:390.
- Downey, L. A. 1945. White colour dominance in pigs. Victoria. Dept. Agr. J. 43:510.
- Downey, L. A. 1945. Carcass yield of pigs (as judged from the live weight). Victoria Dept. Agr. J. 43:110-111.
- Downey, L. A. 1945. Weight for age baconers. Victoria Dept. Agr. J. 43:249.
- Dry, F. W., and Cooper, M. M. 1945. Colour inheritance in cross-bred pigs of Large White - Tamworth origin. New Zeal. J. Sci. Tech. 27:64-71. (ABA 14:242).
- Dyrendahl, S. 1945. Some effects of feeding iodinated casein for a long time to cattle, swine and white rats. Thesis Vet. Med. Roy. Vet. Col. Stockholm 116 pp. (ABA 17:780).
- Fairbanks, B. W., Krider, J. L., and Carroll, W. E. 1945. Effect of diet on gestation-lactation performance of sows. J. Anim. Sci. 4:410-419.
- Fichwick, V. C. 1945. The influence of nutrition during early life on breeding capacity and milk production. Agr. Prog. 20:11-15. (ABA 14:30).
- Green, W. W., and Winters, L. M. 1945. Cleavage and attachment stages in the pig. J. Morph. 78:305.
- Elder, C. R. 1945. The inbred boar goes to the farm. Successful Farming. April.

1945

- *Green, W. W., and Winters, L. M. 1945. The effect of sex on the development of the pig. IV. Histological and endocrinological studies of the boar. J. Anim. Sci. 4:55-62. (ABA 13:97).
- *Green, W. W., and Winters, L. M. 1945. Urinary 17-ketosteroid excretion by boars. J. Agr. Res. 71(11):507-517. (ABA 14:96).
- Gwatkin, R. 1945. Mortality in young pigs. I. Effect of diet from birth to weaning and from weaning to maturity. Canad. J. Compar. Med. 9:263-281.
- Hammond, J. 1945. Problems of pig breeding. Rep. Brit. Soc. Anim. Prod. 4th Meet. pp. 72-83.
- Hankins, O. G., Beard, F. J., and Hiner, R. L. 1945. Measures of carcass grade in meat animals. Natl. Provisioner 112(7): 18-19, 32-33.
- Hankins, O. G., and Ellis, N. R. 1945. Composition and nutritive value of pork as related to weights of animals and cuts. USDA Cir. 731. (ABA 14:30).
- Hetzer, H. O. 1945. Inheritance of coat color in swine. I. General survey of major color variations in swine. J. Hered. 36:121-128. (ABA 13:212).
- Hetzer, H. O. 1945. Inheritance of coat color in swine. II. Results of Landrace by Poland China crosses. J. Hered. 36:186-192. (ABA 13:212).
- Hetzer, H. O. 1945. Inheritance of coat color in swine. III. Results of Landrace by Berkshire crosses. J. Hered. 36:254-256. (ABA 13:212).
- Hetzer, H. O. 1945. Inheritance of coat color in swine. IV. Analysis of hybrids of Landrace and Large Black. J. Hered. 36:308-312. (ABA 14:32).
- Jones, T. L. 1945. Two anomalies in swine. Canad. J. Compar. Med. 9:287.
- Koen, J. S., and Smith, H. C. 1945. An unusual case of genital involvement in swine; associated with eating moldy corn. Vet. Med. 40: 131-133.

1945

- *Lacey, J. J., Bohstedt, G., Phillips, P. H., Chapman, A. B., Grummer, R. H., LaRock, M. J., and Whitehair, C. K. 1945. More profit from pigs. Wis. Agr. Ext. Serv. Cir. 355.
- Lush, Jay L. 1945. Animal breeding plans 3rd Ed. Iowa State Col. Press. Ames.
- Marshall, F. H. A., and Hammond, J. 1945. Fertility and animal breeding. 6th Ed. Min. Agr. Fish B. 39. (ABA 14:188).
- Mayer, D. T., and Lasley, J. F. 1945. The factor in egg yolk affecting the resistance, storage potentialities, and fertilizing capacity of mammalian spermatozoa. J. Anim. Sci. 4:261-269.
- McMeekan, C. P., Peirson, H. M., Johnson, H. E., Kneebone, H., Merrit, F., and Anderson, J. D. 1945. New bacon-judging standards. New Zeal. J. Agr. 70:61-69. (ABA 13:95).
- McPhee, H. C. 1945. Accomplishments of the Regional Animal Research Laboratories: Invitational paper, Amer. Soc. Anim. Prod., Dec. 1, 1944. (Abs.) J. Anim. Sci. 4:96-97.
- Miranda, R. M. 1945. Factors affecting rate of gain and their relation to allotment of pigs for feeding trials. M.S. Thesis. Iowa State Col. Libr. Ames.
- Muhrer, M. E., and Hogan, A. G. 1945. Effect of thiouracil on growing swine. Proc. Soc. Expt. Biol. and Med. 60:211.
- *Nordskog, A. W., and Clark, R. T. 1945. Ergotism in pregnant sows, female rats and guinea pigs. Amer. J. Vet. Res. 6(19):107-116.
- Odrizola, M. 1945. Studies in the fattening house at Porrino. I. Study of an inbred line. Eng. Sum. Bol. Inst. Invest. Agron. 12:9-115. (ABA 15:261).
- Ottestad, P. 1945. On a statistical problem connected with certain investigations of inheritance. Meld. Norg. Landbr Hogsk. 25: 140-148. (ABA 16:181).
- Pearce, J. A., and Woodcock, A. H. 1945. Smoked meats. IV. Measurement of colour and colour stability of Wiltshire bacon. Canad. J. Res. Sect. F., Technol. 23:168-176.
- Phillips, R. W., Johnson, R. G., and Mayer, R. T. 1945. The live-stock of China. Swine Dept. of State. Pub. 2249. Far Eastern Series 9. U. S. Govt. Printing Off. Washington. pp. 117-145.
- Moore, A. U., and Marcuse, F. L. 1945. Salivary, cardiac and motor indices of conditioning in two sows. J. Compar. Psychol. 38:1-13.

1945

- Plummer, P. J. G., and Gwatkin, R. 1945. A porcine monstrosity. *Canad. J. Compar. Med.* 9:214-215.
- Reed, H. J. 1945. Advantages and limitations of the regional laboratories. *J. Anim. Sci.* 4:98-103.
- Roberts, E. 1945. Occurrence of red eye in swine. *J. Hered.* 36:207-208. (ABA 13:212).
- Robison, W. L. 1945. Crossbreeding for the production of market hogs. *Ohio. Agr. Expt. Sta. B.* 675.
- Ross, O. B., Phillips, P. H., Bohstedt, G., and Cunha, T. J. 1945. Congenital malformations, syndactylism, talipes, and paralysis agitans of nutritional origin in swine. *Amer. Vet. Med. Assoc. J.* 106:370-375.
- Self, H. L. 1945. A comparison of reproductive efficiency of sows at the first and second post lactation heats. (Abs.) *J. Anim. Sci.* 4:1254-1255.
- Shorland, F. B., and De LaMare, P. B. D. 1945. Studies on the fats on the bacon pig with reference to carcass quality. I. The effect of diet on the component fatty acids of the back fat. *J. Agr. Sci.* 35:33-38. (ABA 13:211).
- Shorland, F. B., and De LaMare, P. B. D. 1945. Studies on the fats on the bacon pig with reference to carcass quality. II. The relation between growth rate and chemical composition of pig depot fat. *J. Agr. Sci.* 35(1):39-43. (ABA 13:211).
- Sinclair, R. D. 1945. A swine breeding program for western Canada. *Agr. Inst. Rev.* 1:106-112, 114-115.
- Smith, D. M. 1945. Carcass quality. Importance of producing better baconers. *New Zeal. J. Agr.* 71:243-245, 247-248. (ABA 13:210).
- *Stewart, H. A. 1945. An appraisal of factors affecting prolificacy in swine. *J. Anim. Sci.* 4:250-260. (ABA 13:211-212).
- *Stewart, H. A. 1945. The inheritance of prolificacy in swine. *J. Anim. Sci.* 4:359-366. (ABA 14:158).
- Stewart, H. A. 1945. Summary of recent findings in hog breeding research. *Visitor* 32(2): 4.
- Weaver, L. A., and Bogard, R. 1945. Production records are vital to swine improvement. *Amer. Hampshire Herdsman* 20(9): 24, 79.

1945

- Willham, O. S. 1945. The commercial improvement of swine through breeding. Amer. Vet. Med. Assoc. J. 106:36-38.
- Willham, O. S. 1945. Swine improvement through inbreeding and outcrossing. Okla. Agr. Expt. Sta. Cir. 137. (Mimeo.) (ABA 14:158).
- Woodman, H. E., and Evans, R. E. 1945. Nutrition of the bacon pig. XI. The minimum level of protein intake consistent with quick growth and satisfactory carcass quality (Part IV). J. Agr. Sci. (London) 35:133-149.
- Zavadovsky, B. M. 1945. Effect of increased fecundity in swine induced with the aid of the SPM gonad stimulating hormone. C. R. (Dokl.) Acad. Sci. URSS., N. S. 47:225-288. (ABA 13:212).

1946

- Anon. 1946. Minnesota No. 1 dedicated as new breed of swine. Minn. Farm & Home Sci. 4(1):8-9. Oct. 25.
- Atkinson, L. J., and Klein, J. W. 1946. Feed consumption and the production of pork and lard. USDA Tech. B. 917.
- Bean, H. W. 1946. Single weight versus a three-day average weight of swine. J. Anim. Sci. 5:30-35. (ABA 14:158).
- Bennett, J. A., and Coles, J. H. 1946. A comparative study of certain performance and carcass characteristics of Yorkshire barrows and gilts. Sci. Agr. 26:265-270. (ABA 14:157).
- Berge, S. 1946. Inbreeding in relation to growth and viability in suckling pigs. Eng. Sum. Tidsskr. For Det Norske Landbr. 53:305-315. (ABA 15:120).
- Bostock, F. 1946. The bacon pig. Queensland Agr. J. 63:103-108.
- Braude, R., Kon, S. K., and Thompson, S. Y. 1946. A note on certain vitamins of sow's colostrum. J. Dairy Res. 14:414-418.
- Carroll, W. E., and Roberts, E. 1946. Hog cross-breeding results in upgrading, not hybrid vigor. Natl. Livestock Prod. 25(2): 10, 27.
- Asdell, S. A. 1946. Suidae. Patterns of Mammalian Reproduction. Comstock Pub. Co. Inc. Ithaca. pp. 316-327.

1946

- Cole, H. H., and Hughes, E. H. 1946. Induction of estrus in lactating sows with equine gonadotropin. J. Anim. Sci. 5:25-29. (ABA 14:158).
→
- Crampton, E. W., and Ashton, G. C. 1946. The effect on carcass excellence of proportion of animal protein in the hog diet. Sci. Agr. 26:545-547.
- Cummings, J. N., Winters, L. M., and Stewart, H. A. 1946. The heritability of some factors affecting productivity of brood sows. (Abs.) J. Anim. Sci. 5:389.
- Cunha, T. J., Warwick, E. J., and Ensminger, M. E. 1946. Nutritional adequacy of cull peas as a protein supplement for growth, reproduction, and lactation of swine. (Abs.) J. Anim. Sci. 5:419.
- Dawson, W. M., and Revens, R. L. 1946. Varying susceptibility in pigs to alarm. J. Comp. Psycho. 39:297-305. (ABA 17:539).
- De La Mare, P. B. D., and Shorland, F. B. 1946. Some minor constituents of pig back fat. New Zeal. J. Sci. & Technol. Sect. B., Gen. 27:465-474.
- Dickerson, G. E., and Grimes, J. C. 1946. Effectiveness of selection for efficiency of gain in Duroc Jersey swine. (Abs.) J. Anim. Sci. 5:390.
- *Dickerson, G. E., Lush, J. L., and Culbertson, C. C. 1946. Hybrid vigor in single crosses between inbred lines of Poland China swine. J. Anim. Sci. 5:16-24. (ABA 14:241-242).
- Forshaw, R. P. 1946. Ruptures and ridglings (cryptorchid) in hogs. Country Guide 65(5): 21-22.
- Green, W. W., Brugman, H. H., and Winters, L. M. 1946. Equipment for raising baby pigs under laboratory conditions. (Abs.) J. Anim. Sci. 5:418.
- *Green, W. W., and Winters, L. M. 1946. Artificial insemination of farm animals. Minn. Agr. Expt. Sta. B. 336.
- Green, W. W., and Winters, L. M. 1946. Cleavage and attachment stages of the pig. J. Morph. 78:305-316. (ABA 14:243).
- Hanson, L. E. 1946. Some observations on the fertility of boars reared in a restricted environment. (Abs.) J. Anim. Sci. 5:418. (ABA 16:1450).
- Craft, W. A., and Anderson, Arthur L. 1946. Hog raising - a big business. Chapt. 9. A Century of Farming in Iowa - 1840-1940 Iowa State Col. Press. Ames. pp. 97-111.

1946

- Headley, F. B. 1946. Effect of feeding level on daily gains of pigs. J. Anim. Sci. 5:251-255.
- *Hetzer, H. O. 1946. Inheritance of coat color in swine. V. Results of Landrace by Duroc-Jersey crosses. J. Hered. 37:216-224. (ABA 14:242).
- Ivanov, I. I., Kassavina, B. S., and Fomenko, L. D. 1946. Adenosine triphosphate in mammalian spermatozoa. Nature 158:624. (ABA 14:200).
- Kincaid, Charles Morrison. 1946. The effect of inbreeding on fertility and vitality in swine. Ph.D. Thesis. Iowa State Col. Libr. Ames.
- Knight, E. D. 1946. Selective line-breeding of swine. W. Va. Dept. Agr. Mkt. B. 30(10):20.
- Koenig, V. L., and Hogness, K. R. 1946. Electrophoretic analysis of swine plasma and serum. Arch. Biochem. 9:119-128.
- *Kridner, J. L., Fairbanks, B. W., Carroll, W. E., and Roberts, E. 1946. Effectiveness of selecting for rapid and for slow growth rate in Hampshire swine. J. Anim. Sci. 5:3-15. (ABA 14:242).
- Lush, J. L. 1946. Out on first record? Iowa Farm Sci. pp. 6-7. July.
- *Lush, J. L. 1946. Chance as a cause in gene frequency within pure breeds of livestock. Amer. Nat. 80:318-342. (ABA 14:198).
- Makino, S. 1946. On the karyological relationship of the domestic pig and the Japanese wild pig. Kromosome 1:12-17. (ABA 17:541).
- *Miranda, R. M., Culbertson, C. C., and Lush, J. L. 1946. Factors affecting rate of gain and their relation to allotment of pigs for feeding trials. J. Anim. Sci. 5:243-250. (ABA 14:242).
- Muhrer, M. E., Gentry, R. F., and Hogan, A. G. 1946. Abnormal bleeding in farm livestock. (Abs.) J. Anim. Sci. 5:420.
- Musson, A. L. 1946. The influence of the boar on litter size. (Abs.) J. Anim. Sci. 5:418-419. (ABA 16:1447).
- Odriozola, M. 1946. Studies in the fattening house at Porrino. II. The Vitoriano and other native breeds of pig. Eng. Sum. Bol. Inst. Invest. Agron. 14:133-315. (ABA 15:261).

1946

- Reineke, E. P., and McMillen, W. N. 1946. The effect of synthetic thyroprotein on lactation and growth in swine. (Abs.) J. Anim. Sci. 5:420-421. (ABA 16:1442).
- Robison, W. L. 1946. Crossbreeding for the production of market hogs. Ohio Agr. Expt. Sta. Bimonth. B. 31(242):143-152. Sept.-Oct. (ABA 16:1449).
- Robison, W. L. 1946. The influence of the rate of fat deposition on the firmness of the fat of hogs. Ohio Agr. Expt. Sta. B. 664.
- Robison, W. L. 1946. Procedure for improvement thru breeding and selection; a program for the practical breeder who is interested in herd improvement. Duroc News 20(7): 34, 218-223.
- Swegle, W. 1946. Inbreeding may improve swine. Iowa Agr. 45(5): 8-9, 25.
- Verbeek, W. A. 1946. The weaning of piglets at an early age. Fmg. S. Afr. 21:271-275. (ABA 14:157).
- Warwick, E. J. 1946. The \$64 question; how will he breed? Duroc News 20(7): 20, 206, 208.
- Weiss, J. N. 1946. A summary of sow-testing data in Illinois. Agr. Ed. Mag. 18:127.
- Whatley, J. A., Jr. 1946. Linebreeding. Okla. Agr. Expt. Sta. B. 296:15-21. Also Aberdeen Angus J. 27(11):28, 40-J-40-K, June, Hereford J., Amer. Hampshire Herdsman 21(9):66. Sept., Sheep and Goat Raiser 26(11):14-15. June, November 22, 25.
- Winters, L. M. 1946. The Minnesota No. 2 lines of swine. Amer. Feed & Grain Dealer. Aug.
- Winters, L. M. 1946. Nine years of swine breeding bring results. Minn. Farm & Home Sci. 3(2). 2-3. Feb. (ABA 16:182).
- Winters, L. M. 1946. Swine breeding at Minnesota. Hoard's Dairyman 91:496, 498.
- Winters, L. M. 1946. Lean and efficient; Minnesota pork professors produce a new breed of hog. Farm Q. 1(3): 72-75, 141.
- Wislocki, G. B., and Dempsey, E. W. 1946. Histochemical reactions of the placenta of the pig. Amer. J. Anat. 78:181-225. (ABA 16:185).

1947

- Andrews, F. N., Shrewsbury, C. L., Harper, C., Vestal, C. M., and Doyle, L. P. 1947. Iodine deficiency in newborn sheep and swine. (Abs.) J. Anim. Sci. 6:496.
- Aunan, W. J. 1947. Variation of muscle, fat and bone in swine carcasses. M.S. Thesis. U. Minn. Libr. St. Paul.
- Beeson, W. M., Andrews, F. N., Witz, H. L., and Perry, T. W. 1947. The effect of thyroprotein and thiouracil on the growth and fattening of swine. J. Anim. Sci. 6:482. (ABA 17:960).
- Blunn, C. T., and Baker, M. L. 1947. Heritability estimates of sow productivity and litter performance. (Abs.) J. Anim. Sci. 6:476.
- *Blunn, C. T., and Baker, M. L. 1947. The relation between average daily gain and some carcass measurements. J. Anim. Sci. 6:424-431. (ABA 16:175).
- Brandon, Manual Carren, Jr. 1947. The use of a score card for appraising the conformation of the live hog. M.S. Thesis. Okla. State U. Libr. Stillwater.
- Bratzler, L. J., Farwell, E. D., and McMillen, W. N. 1947. An index for estimating pork carcass yields. (Abs.) J. Anim. Sci. 6:481. (ABA 17:951).
- Braude, R. 1947. Stimulation of growth and fattening of pigs by synthetic oestrogens. Brit. J. Nutr. 1:3-4. (ABA 16:1444).
- Braude, R., Coates, M. E., Henry, K. M., Kon, S. K., Rowland, S. J., Thompson, S. Y., and Walker, D. M. 1947. A study of the composition of sow's milk. Brit. J. Nutr. 1(1):64-77. (ABA 16:1438).
- Brekke, T. 1947. Causes of mortality in the herds at the State Pig Breeding Station. 1932-44. Eng. Sum. Meld. Norg. Landbr Hogsk. 27:379-392. (ABA 17:138).
- Brugman, H. H. 1947. An analysis of the breeding methods employed in the development of the Minnesota No. 1 inbred line of swine at the Minnesota North Central Experiment Station. Ph.D. Thesis. U. Minn. Libr. St. Paul.

1947

- Callow, E. H. 1947. Comparative studies of meats. I. The chemical composition of fatty and muscular tissues in relation to growth and fattening. J. Agr. Sci. 37(2):113-131.
- Carroll, W. E., and Roberts, E. 1947. Hybrid hogs? There is no such animal. Duroc News. Feb. 20, 107-114.
- Carroll, W. E., and Roberts, E. 1947. The hybrid hog fallacy; continuing the same set of characters from generation to generation is impractical if not impossible. Pol. China World 34(4): 12, 14. Also Amer. Hampshire Herdsman 22(3):10-11, 15, 32.
- Chipault, J. R., and Lundberg, W. O. 1947. The presence of δ -tocopherol in hog fats. Arch. Biochem. 12:317-318.
- Craft, W. A. 1947. Research in hog breeding and market type. Chester White World 28(6):8-12.
- Craft, W. A. 1947. Research in hog breeding and market type; swine producers need more definite standards for type and market grades of hogs of various weights. Amer. Hampshire Herdsman 22(10):22-23, 27, 97-98.
- Craft, W. A. 1947. Research with inbred lines in the Regional Swine Breeding Laboratory. Proc. Assoc. So. Agr. Wkrs. Conv. 44: Also Chester White World 27(10):2-5.
- Craft, W. A. 1947. Research in hog breeding and market type. Res. Conf. Amer. Meat Inst. Sept. 3, Chicago. Also Meat 27(4):171-173.
- Craft, W. A. 1947. The truth about "inbred hogs". Hog Breeder 22:10, 11, 84. Apr.
- Craft, W. A. 1947. U.S.D.A. research work to improve market types of livestock. Natl. Prov., Sept. 13. p. 15.
- *Cummings, J. N., Winters, L. M., and Stewart, H. A. 1947. The heritability of some factors affecting productivity of brood sows. J. Anim. Sci. 6:297-304. (ABA 16:176).
- *Dickerson, G. E. 1947. Composition of hog carcasses as influenced by heritable differences in rate and economy of gain. Iowa Agr. Expt. Sta. Res. B. 354. (ABA 16:1036).

1947

- *Dickerson, G. E., and Grimes, J. C. 1947. Effectiveness of selection for efficiency of gain in Duroc swine. J. Anim. Sci. 6:265-287. (ABA 16:177).
- Dickerson, G. E., Lush, J. L., Baker, M. L., Whatley, J. A. Jr., and Winters, L. M. 1947. Performance of inbred lines and line crosses in swine. (Abs.) J. Anim. Sci. 6:477. (ABA 17:967).
- Duthie, R. C. 1947. Malformation of the jaws in Yorkshire swine. Agr. Inst. Rev. (Ottawa) 2:397-400. (ABA 16:178).
- Ensminger, M. E., Bowland, J. P., and Cunha, T. J. 1947. Observations on the thiamine, riboflavin, and choline needs of sows for reproduction. J. Anim. Sci. 6:409-423.
- Fraser, E. B., and Stothart, J. G. 1947. Testing Swedish Landrace Swine in Canada. Canada Dept. Agr. Pub. 801 (Tech. B. 64.) (ABA 16:591).
- *Green, W. W., Brugman, H. H., and Winters, L. M. 1947. Artificial rearing of baby pigs. J. Anim. Sci. 6:146-153.
- Hammond, J. 1947. Hereditary factors in hogs; for breeding purposes animals cannot always be taken at face value. Amer. Hampshire Herdsman 22(9):25-26, 28, 91.
- Hammond, M. L. 1947. Fibrous occlusion of the cervix in a sow. Vet. Med. 42:430-431.
- Hammond, J. 1947. Animal breeding in relation to nutrition and environmental conditions. Biol. Rev. 22:195-213. (ABA 15:227).
- Hammond, J. 1947. Hereditary factors in pigs. Pig Breed. Gaz. 53: 15-20.
- Hanawalt, V. M., and Sampson, J. 1947. Studies on baby pig mortality. IV. Chemistry of the blood during fasting and re-feeding of weaning pigs. Amer. J. Vet. Res. 8(26):73-81.
- Headley, F. B. 1947. Effect of feeding level and liveweight on daily gains of pigs. J. Anim. Sci. 6:378-384. (ABA 16:173).
- Hetzer, H. O. 1947. Inheritance of coat color in swine. VI. Results of Yorkshire by Duroc-Jersey crosses. J. Hered. 38:120-124. (ABA 15:262).

1947

- Johnson, L. E. 1947. Are hybrid hogs coming? *Dakota Farmer* 67(3): 1, 15, 37.
- Johnson, L. E. 1947. Improving the hogs you raise. *Dakota Farmer* 67(4): 1, 12-13.
- Kislowsky, D. (Kislovskii, D. A.) 1947. Pig breeding problems in U.S.S.R. *Pig Breed. Gaz.* 53:69, 64. (ABA 15:184).
- Korkman, N. 1947. Causes of variation in the size and weight of litters from sows. *Acta. Agr. suec.* (Stockholm) 2(3):253-310. (ABA 16:180).
- Laben, Robert C. 1947. The amount and effectiveness of selection in inbred lines of swine. M.S. Thesis. Okla. State U. Libr. Stillwater.
- Laben, R. C., and Whatley, J. A., Jr. 1947. Selection in an inbred line of Duroc swine. (Abs.) *J. Anim. Sci.* 6:478. (ABA 17:968).
- *Lush, J. L. 1947. Family merit and individual merit as bases for selection. I. *Amer. Nat.* 81:241-261.
- *Lush, J. L. 1947. Family merit and individual merit as bases for selection. II. *Amer. Nat.* 81:362-379.
- Moxley, H. F., Blank, G., and McMillen, W. N. 1947. Michigan sow testing and swine extension swine feeding projects. (Abs.) *J. Anim. Sci.* 6:481.
- Powell, Marvin Bass. 1947. The effect of inbreeding on the litter size of swine. M.S. Thesis. Okla. State U. Libr. Stillwater.
- Sewell, W. E. 1947. Cross-breed hogs experiment. *So. Agr.* 77(2):30.
- Smith, H. J. 1947. A study of the nature of the differences between two lines of swine selected for rapid and slow growth rates. M.S. Thesis. U. Ill. Libr. Urbana.
- Stothart, J. G. 1947. A study of parental-progeny correlations with Canadian bacon hogs. *Sci. Agr.* 27(8):354-363.

1947

- Tanabe, T. Y., Casida, L. E., and Grummer, R. H. 1947. The effects of gonadotrophins administered to sows at different stages of the estrous cycle. (Abs.) J. Anim. Sci. 6:500. (ABA 17:972).
- Wallach, D. P., McMillen, W. N., Newland, H. W., and Reineke, E. P. 1947. The influence of thyroprotein, thiouracil and breed on growth and thyroid characteristics in swine. (Abs.) J. Anim. Sci. 6:501-502. (ABA 17:963).
- Warnick, A. C., Casida, L. E., and Grummer, R. H. 1947. Occurrence of postpartum estrus and ovulation in sows. (Abs.) J. Anim. Sci. 6:502. (ABA 17:973).
- Warnick, A. C., Grummer, R. H., and Casida, L. E. 1947. Some genital conditions associated with lowered fertility in sows. (Abs.) J. Anim. Sci. 6:502. (ABA 17:974).
- Warwick, E. J. 1947. Select a good boar. Westerner 11(9): 61, 85.
- Warwick, E. J. 1947. Breeding boars--type and productivity are paramount in selection. West. Livestock J. 25(55):121.
- Whatley, J. A. 1947. The effect of inbreeding of the litter on the production performance of sows. (Abs.) Proc. Assoc. So. Agr. Wkrs. Conv. 44.
- Whatley, J. A. 1947. Litter testing for rate and economy of gain. Okla. Agr. Expt. Sta. MP-11:18-22.
- Winters, L. M. 1947. Inbreeding results. Poultry Farmer (London) 116(3022):5.
- *Winters, L. M., Cummings, J. N., and Stewart, H. A. 1947. A study of factors affecting survival from birth to weaning and total weaning weight of the litter in swine. J. Anim. Sci. 6:288-296. (ABA 16:171).
- Zeller, J. H. 1947. Landrace enters America. West. Farm Life 49(1, Sect. 2, Annu. Livestock Rev. 1947); 181, 186.
- *Zeller, John H. 1947. Progress in hog production. USDA Ybk. of Agr. 1943-47. pp. 201-208.

1948

- Alexandrowicz, S. 1948. Short eared pig breed and its significance in this country. Eng. Sum. (Pol.) Przegl Hodowlany 16:140-146.
- Asdell, S. A. 1948. Hormones in growth and fattening of beef cattle, sheep and swine. Feedstuffs 20(2):26-28. (ABA 20:19).
- Bandelier, K. J. 1948. Swine research will increase pork profits; Regional Swine Breeding Laboratory discovers, develops, and tests swine improvement methods. Purdue Agr. 39(5):5, 20-21.
- Barnhart, C. E., Catron, D., Culbertson, C. C., Shearer, P. S., and Leith, T. S. 1948. Technique of obtaining sow's milk, its composition and effect on pigs. Feedstuffs 20(15):44-47.
- Berge, S. 1948. Genetical research on the number of vertebrae in the pig. Norges Landbrukshogsk. Meld. 39, 6 p.
- Berge, S. 1948. Genetical researches on the number of vertebrae in the pig. J. Anim. Sci. 7:233-238. (ABA 16:1445).
- Braude, R. 1948. Some observations on the behavior of pigs in an experimental piggery. B. Anim. Behav. 6:17-25.
- Braude, R. 1948. Stimulation of growth in pigs by iodinated casein and stilboestrol. Nature (Lond) 161:856. (ABA 16:1034).
- Brekke, T. 1948. Results from swine experiments at the State Pig Breeding Station, 1932-1944. Eng. Sum. Tidsskr. For Det Norske Landbr. 1948:109-149.
- Brugman, H. H. 1948. A genealogy study of the Minnesota No. 1 line. Ph.D. Thesis. U. Minn. Libr. St. Paul.
- Callow, E. H. 1948. Comparative studies of meats. II. The changes in the carcass during growth and fattening and their relation to the chemical composition of the fatty and muscular tissues. J. Agr. Sci. 38(2):174-199. (ABA 18:14).
- Catron, Damon Von. 1948. Effect of gestation and lactation nutrition of sows on the livability and growth of their pigs. Ph.D. Thesis. Iowa State U. Libr. Ames.
- Craft, W. A. 1948. Experimental effort relating to improving the performance of hogs through breeding. Nebr. Swine Day, Sept. 24, Lincoln.

1948

- Catron, D., Culbertson, C. C., and Shearer, P. S. 1948. Studies on young pig mortality. (Abs.) J. Anim. Sci. 7:522.
- Comstock, R. E., Peterson, W. J., and Stewart, H. A. 1948. An application of the balanced lattice design in a feeding trial with swine. J. Anim. Sci. 7:320-331.
- Comstock, R. E., and Robison, H. F. 1948. The components of genetic variance in populations of biparental progenies and their use in estimating the average degree of dominance. Biometrics. 4:254-266.
- *Craft, W. A. 1948. Progressive swine breeding. U. Ill. Ext. Serv. Anim. Sci. AS-13. (Ill. Swine Growers' Day, Apr. 8, 1948). (Mimeo).
- Craft, W. A. 1948. Progressive swine breeding. Iowa Swine Breed. Dir. 1948/49:19, 36.
- Cummings, J. N. 1948. A study of factors related to carcass. Ph.D. Thesis. U. Minn. Libr. St. Paul.
- Donald, H. P. 1948. Inbreeding as an alternative to outbreeding. J. Roy. Agr. Soc. Eng. 109:166-174. (ABA 17:1218).
- Duthie, R. C. 1948. An unusual autopsy finding in a purebred Yorkshire sow involving inbreeding, congenital malformation, chronic rhinitis and a neoplasm. Canad. J. Comp. Med. 12:288-291. (ABA 17:143).
- Engelman, G., Dowell, A. A., Ferring, E. F., and Anderson, P. A. 1948. Marketing hogs by weight and grade of carcass. Minn. Farm & Home Sci. 6:1-2.
- England, Milton W. 1948. Effectiveness of selection for litter size and mammae number in an outbred herd of swine. M.S. Thesis. Okla. State U. Libr. Stillwater.
- Ensminger, M. E., Brugman, H. H., and Johnson, R. F. 1948. Production of a bacon type hog suitable to the feed and climatic conditions of the Pacific Northwest. (Abs.) J. Anim. Sci. 7:511. (ABA 17:1393).
- Goode, J. S. (Translator and Compiler and Rudduck, H. B., Editor). 1948. Artificial insemination of farm animals in the Soviet Union. U.S.S.R. Dept. of Agr. Sydney and London: Angus and Robertson, 176 pp. (ABA 17:1171).
- Green, J. A., and Nalbandov, A. V. 1948. Incidence and histology of reproductive abnormalities in the sow. (Abs.) J. Anim. Sci. 7:540-541.

1948

- Gwatkin, R., and Plummer, P. J. G. 1948. Mortality in young pigs. III. The effect of deficient diets on successive generations. *Canad. J. Compar. Med.* 12:82-89.
- Haines, W. J., Johnson, R. H., Goodwin, M. P., and Kuizenga, M. H. 1948. Biochemical studies on hog testicular extract. I. Isolation and identification of 5-pregnen-3(β)-ol-20-one. *J. Biol. Chem.* 174:925-937. (ABA 18:175).
- Hale, F., and Godbey, C. B. 1948. Linebreeding - what it is, and suggestions for a constructive program. *Duroc News* 22(7):48, 52, 56.
- Hankins, O. G. 1948. New horizons in the field of meat research. *Proc. 1st Annu. Rec. Meat Conf.* June 15-16, Chicago. 1:183-186.
- Hanson, L. E., and Hathaway, I. L. 1948. The fertility of boars fed a vitamin E deficient ration. (Abs.) *J. Anim. Sci.* 7:528.
- Hauser, E. R., and Dickerson, G. E. 1948. Some strain and inbreeding differences in gross testicular development of swine. (Abs.) *J. Anim. Sci.* 7:512. (ABA 17:1398).
- *Hazel, L. N., and Lush, J. L. 1948. Inbreeding hogs. *Iowa Farm Sci.* 10:3-6.
- Hazel, L. N., Musson, A. L., and Lush, J. L. 1948. Comparison on inbred Poland China, Landrace and purebred boars on Iowa farms. (Abs.) *J. Anim. Sci.* 7:512-513. (ABA 17:1399).
- Hazel, L. N., and Lush, J. L. 1948. La generacion interconsanguinea de los cerdos. *Agrotecnia* 2:659-668.
- Heidebrecht, A. A., Ross, O. B., MacVicar, R. W., and Whitehair, C. K. 1948. Reproduction and lactation studies of swine fed corn-soybean oil meal rations. (Abs.) *J. Anim. Sci.* 7:528.
- Heidebrecht, A. A., MacVicar, R. W., and Ross, O. B. 1948. A study of nutritional deficiencies in swine rations related to reproduction and lactation. (Abs.) *Proc. Assoc. So. Agr. Workers. Conv.* 45:103.
- Henderson, C. R. 1948. Estimation of general, specific, and maternal combining abilities in crosses among inbred lines of swine. Ph.D. Thesis. Iowa State Col. Libr. Ames.

1948

- Hetzer, H. O. 1948. Inheritance of coat color in swine. VII. Results of Landrace by Hampshire crosses. J. Hered. 39:122-128. (ABA 16:1446).
- Hetzer, H. O., Hankins, O. G., King, J. X., and Zeller, J. H. 1948. Relationship between certain body measurements and yield of five preferred cuts in swine. (Abs.) J. Anim. Sci. 7:513. (ABA 17:1394).
- Hisaw, F. L., and Zarrow, M. X. 1948. Relaxin in the ovary of the domestic sow (*Sus scrofa* L.) Proc. Soc. Expt. Biol. & Med. 69:395-398. (ABA 17:544).
- Holst, S. 1948. Sterility in boars. (Abs.) Zootec. e Vet. 3(6):56.
- Hutchings, L. M. 1948. Sterility in swine. J. Amer. Vet. Med. Assoc. 112:114-118. (ABA 16:1451).
- *Hutton, R. E., Quesenberry, J. R., Zeller, J. H., and Davis, R. L. 1948. The Hamprace hog. Mont. Agr. Expt. Sta. B. 454. (ABA 18:621).
- James, Wesley, E. 1948. A comparison of carcasses of pigs from different lines of breeding. M.S. Thesis. Okla. State U. Libr. Stillwater.
- Johnson, L. E., and Wright, T. 1948. The comparative efficiency of bred and open sows when fattened and slaughtered. J. Anim. Sci. 7:92-98. (ABA 16:594).
- Knight, E. D. 1948. Selective linebreeding of swine. East. Breeder 9:63, 65-66.
- Kottman, R. M. 1948. The incidence and embryological development of inverted nipples in swine. M.S. Thesis. U. Wis. Libr. Madison.
- Kottman, R. M., Lush, J. L., and Hazel, L. N. 1948. Selection in inbred lines of swine. (Abs.) J. Anim. Sci. 7:513-514. (ABA 17:1400).
- Larson, Eldon. 1948. Feeding tests with inbred lines and line crosses of swine. M.S. Thesis. Okla. State U. Libr. Stillwater.
- Lush, J. L. 1948. The genetics of populations. Iowa State Col. Ames. 364 pp. (Mimeo).

1948

- *Lush, J. L., Culbertson, C. C., Craft, W. A., Shearer, P. S., and Hazel, L. N. 1948. History of swine breeding research at the Iowa Station. Iowa Agr. Expt. Sta. Rpt. on Agr. Res. Year End. June 30, 1948. pp. 17-32. (ABA 19:1821).
- Magee, William T. 1948. Inheritance of scrotal hernia in inbred swine. M.S. Thesis. Iowa State Col. Libr. Ames.
- Malingiewicz, C. 1948. A cleft of the right upper lip, the left lower lip and a partial cleft palate in a suckling pig. Med. Wet. 4:552-553.
- Malingiewicz, C. 1948. Polydactylism on all four limbs in a swine. Med. Wet. 4:553-554.
- Moore, E. N., and Miller, M. E. 1948. A pseudohermaphrodite pig. Cornell Vet. 38:98-101. (ABA 16:1452).
- Mount, L. E. 1948. Changes in oxygen consumption with age in piglets during the first week of life. J. Physiol. 142(2):57.
- North, A. D. 1948. Carcass investigations on the pig. Rib and teat count. Victoria Dept. Agr. J. 46:265-267. (ABA 17:969).
- Olbrycht, T. 1948. Studies on reproductive performance and on an effective method of animal selection. B. int. Acad. polon. Sci. Lett. Cl. Sci. math. nat. B(II), 1948(7/10):129-200. (ABA 18:1037).
- Ray, J. 1948. Inherited qualities in hogs. Ala. Farmer 26(3):7.
- Reineke, E. P., McMillen, W. N., and Bratzler, L. J. 1948. The effect of mild thyroprotein stimulation on growth in swine. Mich. State Col. Agr. Expt. Sta. Tech. B. 209.
- *Roberts, L. D. 1948. Microphthalmia in swine. J. Hered. 39:146-148. (ABA 16:1448).

1948

- *Robison, W. L. 1948. Crossbreeding for the production of market hogs. Ohio Agr. Expt. Sta. B. 675. (ABA 19:1811).
- Russell, W. C., Teeri, A. E., and Unna, K. 1948. Growth and reproduction of swine on a purified diet. J. Nutr. 35:321-332. (ABA 20:766).
- Schrader, F. M. 1948. Factors influencing the dressed weight of hogs. Econ. Ann. 18:39-41.
- Sierk, C. F. 1948. A study of heterosis in swine. (Abs.) J. Anim. Sci. 7:515. (ABA 17:1402).
- Sierk, Carl Frederick. 1948. A study of heterosis in swine. Ph.D. Thesis. U. Minn. Libr. St. Paul.
- Smith, Martin Cleoh. 1948. Study of the amount and intensity of selection practiced in an inbred line of swine. M.S. Thesis. Okla. State U. Libr. Stillwater.
- Stewart, H. A., and Comstock, R. E. 1948. A comparison of inbred lines of swine based on their performance in topcrosses. (Abs.) J. Anim. Sci. 7:515-516. (ABA 17:1403).
- Stringham, E. W. 1948. An analysis of breeding methods employed in the development of the Poland China herd of swine at the Minnesota West Central Experiment Station. Ph.D. Thesis. U. Minn. Libr. St. Paul.
- Torres, J. R., and Codo, V. 1948. A case of pseudo-hermaphroditism in the pig. Eng. Sum. Riv. Ceres. (Vicosa) 8(44):96-98. (ABA 19:761)
- Vernon, E. H. 1948. Sex ratios among inbred, non-inbred, and linecross pigs. (Abs.) J. Anim. Sci. 7:516-517. (ABA 17:1404).

1948

- Vernon, Eugene H. 1948. Sex ratios among inbred, non-inbred, and linecross pigs. M.S. Thesis. Iowa State Col. Libr. Ames.
- Wallace, C. R. A. 1948. The effect of stilboestrol on the semen and reproductive organs of the boar. Cambridge U. Abs. Diss. 1945/1946: 12-13.
- Wallace, D. P., Newland, H. W., and McMillen, W. N. 1948. Some studies on temperature adaptation in the baby pig. Q. B. Mich. Agr. Expt. Sta. 30:277-282. (ABA 16:587).
- Warnick, A. C., Grummer, R. H., and Casida, L. E. 1948. The nature of reproductive failures in sows of low fertility. (Abs.) J. Anim. Sci. 7:545.
- Warwick, E. J. 1948. Genetics and animal breeding. Pop. B. Wash. Agr. Expt. Sta. 189:58 pp. (ABA 17:1222).
- Warwick, E. J. 1948. Boar buying time-type and productivity are paramount in selection. Duroc News 22(9):18, 160.
- Warwick, E. J. 1948. Litter size--its importance and possibilities for improvement. Duroc News 22(1):38, 84, 88, 93.
- Warwick, E. J. 1948. Think twice when you buy a boar. Berkshire News 13(11):62-63, 66.
- Whatley, J. A. 1948. Feeding tests with inbred lines and line crosses in swine. Okla. Agr. Expt. Sta. MP-13:34-36.
- Whatley, J. A., and Wiggins, E. L. 1948. The effect of feeding method on interlot variation in feed lot performance of swine. (Abs.) Proc. Assoc. So. Agr. Workers Conv. 45.
- Wiggins, E. L., Casida, L. E., and Grummer, R. H. 1948. The incidence of female genital abnormalities in swine. (Abs.) J. Anim. Sci. 7:545.
- Wiggins, Earl L. 1948. The effect of method of feeding on interlot variation of feed lot performance of swine. M.S. Thesis. Okla. State U. Libr. Stillwater.
- Wilford, E. J. 1948. Review of current pork carcass and lard research. Proc. 1st Annu. Rec. Meats Conf. June 15-16. Chicago.
- Wilson, R. F., Nalbandov, A. V., and Krider, J. L. 1948. Reproductive abnormalities of females from selected and unselected populations of swine. (Abs.) J. Anim. Sci. 7:546.

1948

- Winters, L. M. 1948. Cruzamientos porcinos. Rev. Ganad. (Habana) 8(9):31-32.
- Winters, L. M. 1948. Minnesota's swine breeding project. Agr. Leaders' Digest 29(9):16-17.
- Winters, L. M. 1948. Animal Breeding. 4th ed. John Wiley and Sons, Inc. N. Y.
- Winters, L. M. 1948. The famous Minnesota hogs. The Westerner. pp. 16, 17, 37, 40, and 41.
- Winters, L. M. 1948. Minnesota swine breeding project develops new lines. Minn. Farm & Home Sci. 5(3):2, 3, 11.
- *Winters, L. M., Dailey, D. L., Jordan, P. S., Kiser, O. M., Hodgson, R. E., Cummings, J. N., and Sierk, C. F. 1948. Experiments with inbreeding swine. Minn. Agr. Expt. Sta. B. 400. (ABA 17:543).
- Woodman, H. E., and Evans, R. E. 1948. Nutrition of the bacon pig. XIII. The minimum level of protein intake consistent with maximum rate of growth. J. Agr. Sci. 38:354-365.

1949

- Agcanas, P. B. 1949. A preliminary study on the sex ratio of the different breeds of pigs farrowed at Alabang Stock Farm from January, 1936 to March 2, 1949. Phil. J. Anim. Indus. 10:181-185. (ABA 18:1479).
- Agcanas, P. B. 1949. Notes on the Australian Berkshire pigs. Phil. J. Anim. Indus. 10:193-198. (ABA 18:1461).
- Agcanas, P. B. 1949. An analysis of the breeding records of pigs at Alabang Stock Farm. Phil. J. Anim. Indus. 10:187-191. (ABA 18:1480).
- Anderson, P. A. 1949. The need for establishing a closer correlation in the judging of live animals and their carcass grades and cut-out values. Proc. 2nd Annu. Rec. Meat Conf. June 15-16. Chicago. 2:44-46.
- Andrews, F. N., and Warwick, E. J. 1949. Comparative testicular development of some inbred, purebred, crossbred and linecross boars. (Abs.) J. Anim. Sci. 8:603.

1949

- Anon. 1949. Eye-colour in pigs. *Pig Breed. Gaz.*, 59:23. (ABA 17:1390).
- Anon. 1949. Breed crosses effective in developing meat type hogs. USDA Bur. Anim. Indus.
- Arthaud, Raymond L. 1949. Influence of some factors on gestation length of inbred swine. M.S. Thesis. U. Nebr. Libr. Lincoln.
- *Aunan, W. J., and Winters, L. M. 1949. A study of the variations of muscle, fat, and bone of swine carcasses. *J. Anim. Sci.* 8:182-190. (ABA 17:950).
- Bartolini, A. 1949. The effect of age of sow at first pregnancy on the birth weight of the first litter. *Eng. Sum. (Ital). Ann. Della Sper. Agr. (n.s.)* 3:521-527. (ABA 18:174).
- Beard, Fred J. 1949. Problems and developments in meat grading. *Proc. 2nd Annu. Rec. Meat Conf. June 15-16. Chicago* . 2:171-176.
- Beeson, W. M., Andrews, F. N., Perry, T. W., and Witz, H. L., Jr. 1949. The effect of thyroprotein and thiouracil on the growth and fattening of swine. *J. Anim. Sci.* 8:508-517. (ABA 18:165).
- Blount, W. P. 1949. Minnesota No. 1: this is a lean meat pig. *Poultry Farmer (London)* 120(3118):15.
- *Blunn, C. T., and Baker, M. L. 1949. Heritability estimates of sow productivity and litter performance. *J. Anim. Sci.* 8:89-97. (ABA 17:966).
- Bolong, D. S. 1949. A comparative study of the weights, measurements, chemical composition, and curing of the right and left sides of hog carcasses. *Phil. J. Anim. Indus.* 9:141-160.
- Bowland, J. P., Grummer, R. H., Phillips, P. H., and Bohstedt, G. 1949. Effect of lactation and ration on the fat and vitamin A level of sow's milk. *J. Dairy Sci.* 32:22-28. (ABA 17:537).
- Bowland, J. P., Grummer, R. H., Phillips, P. H., and Bohstedt, G. 1949. The effect of the plane of nutrition on the composition of sows' colostrum and milk. *J. Anim. Sci.* 8:199-206.
- Bratzler, L. J. 1949. Determining the tenderness of meat by the use of the Warner-Bratzler method. *Proc. 2nd Annu. Rec. Meat Conf. June 15-16. Chicago*. 2:117-120.

1949

- Braude, R. 1949. Stimulation of growth in pigs by iodinated casein and stilboestrol. Internatl. Cong. Bio-Chem. Abs. Commun. 1:29-30.
- Braude, R., Free, A. A., Page, J. E., and Smith, E. L. 1949. The distribution of radioactive cobalt in pigs. Brit. J. Nutr. 3: 289-292.
- Bray, C. I., and Singletary, C. B. 1949. A study of continuous three way crossing in swine. (Abs.) Proc. Assoc. So. Agr. Workers Conv. 46:72-73.
- Briquet, R. Jr. 1949. Crossbreeding pigs. Rev. Riv. Ceres (Vicosa) 8(44):124-137. (ABA 19:748).
- Brown, C. J., Hillier, J. C., and Whatley, J. A. 1949. The relationship between specific gravity and certain physical characteristics of the pork carcasses. (Abs.) J. Anim. Sci. 8:612.
- *Brugman, H. H., Winters, L. M., and Dailey, D. L. 1949. A geneology study of the Minnesota No. 1 hog. Minn. Agr. Expt. Sta. Tech. B. 184. (ABA 19:232).
- Byerly, T. 1949. USDA specialist tells how to grow more meaty hog. Natl. Provisioner 121(14):130-131.
- Byerly, T. C. 1949. How fat should a hog be? Ohio Farmer 204(3): 3, 32.
- Byerly, T. C. 1949. Swine production practices and the lard problem. Meat 31(5): 175-176.
- Byerly, T. G., Zeller, J. H., and Gapen, K. M. 1949. The world's best hogs. U. S. Dept. Agr. Off. of Inform.
- Callow, E. H. 1949. Comparative studies of meat. III. Rates of fattening in relation to the percentage of muscular and fatty tissue in a carcass. J. Agr. Sci. 39(4):349-353.
- Cartright, T. C., and Schrode, R. R. 1949. Studies on the inheritance of color markings in Hampshire swine. (Abs.) J. Anim. Sci. 8:603.
- Casida, L. E. 1949. Problems, techniques and experimental designs in animal investigations. Physiology. (Abs.) J. Anim. Sci. 8:611.

1949

- Comstock, R. E. 1949. Prolificacy as a factor in the genetic improvement of farm animals. (Abs.) J. Anim. Sci. 8:604.
- Comstock, R. E., Robinson, H. F., and Harvey, P. H. 1949. A breeding procedure designed to make maximum use of both general and specific combining ability. Agron. J. 41(7):360-367.
- Craft, W. A. 1949. Regional Swine Breeding Laboratory. (Letter). Proc. 2nd Annu. Rec. Meat Conf. June 15-16, Chicago. 2:189-190.
- Dabczewski, Z. 1949. Studies on a teratological form of the newly born Pulawska (Golebska) swine. (Eng.) Bulletin de l'Acad. des Sciences 1949. Ser. BII:241-260. (ABA 18:1032).
- Dale, H. E. 1949. The concentration of calcium and inorganic phosphorus in the blood plasma of swine during gestation and time of parturition. M.S. Thesis, Iowa State Col. Libr. Ames.
- Davidson, H. R. 1949. Bacon and pork production. Rpt. Nat. Pig Conf. Harper Adams Agr. Col. Newport, Salop, March 31st, 1949. pp. 19-21. (ABA 18:163).
- *Dickerson, G. E. 1949. The importance of heterosis for total performance in animals. (Abs. 560). Proc. 8th Internatl. Cong. Genet. Hereditas Sup. 1949.
- Dickerson, G. E. 1949. Use of inbred strains for improving swine production. Third Annu. Fall Livestock Day, Oct. 28, 1949. U. Mo., Columbia. pp. 3-6.
- Donald, H. P. 1949. The inheritance of a tail abnormality associated with urogenital disorders in pigs. J. Agr. Sci. 39(2):164-173. (ABA 18:169).
- Durham, R. M. 1949. Inbred and linecross boars versus non-inbred and non-linecross boars used in two-sire herds on Wisconsin farms. M.S. Thesis. U. Wis. Libr. Madison.
- Durham, R. M., Chapman, A. B., and Grummer, R. H. 1949. Inbred and linecross boars versus non-inbred and non-linecross boars used in two-sire herds on Wisconsin farms. (Abs.) J. Anim. Sci. 8:605.
- Felts, L. L. 1949. Comparison of selection indexes in swine. M.S. Thesis. U. Wis. Libr. Madison.
- Filmer, J. F. 1949. Incidence of crooked jaw in pigs. Rep. New Zeal. Dept. Agr. 1948-49:86-87. (ABA 19:1817).

1949

- Filmer, J. F. 1949. Observations on the milk yield of sows. Rep. New Zeal. Dept. Agr. 1948-49:87. (ABA 19:1827).
- Gaines, P. C. 1949. Swine values; body types and carcasses studied for development of a better hog. Calif. Agr. 10(3):11.
- Gilman, J. W. P. 1949. Inherited facial conformation and susceptibility to infectious atrophic rhinitis of swine. Canad. J. Compar. Med. 13:266-274. (ABA 18:170).
- Godbey, E. G. 1949. Some factors affecting the economy of gains of swine. (Abs.) Proc. Assoc. So. Agr. Workers Conv. 46:69.
- Green, J. A., and Nalbandov, A. V. 1949. The production of cysts in normal and pregnant sows with pregnant mare's serum. (Abs.) J. Anim. Sci. 8:640.
- Hammond, J. 1949. Pig breeding. Rpt. Natl. Pig Conf. Harper Adams Agr. Col. Newport, Salop, March 31st, 1949. pp. 11-16. (ABA 18:160).
- Hauser, E. R., Squiers, C. D., Dickerson, G. E., and Mayer, D. T. 1949. Inbreeding and strain differences in reproductive performance of boars. (Abs.) J. Anim. Sci. 8:640.
- Hays, R. L., and Nalbandov, A. V. 1949. The hormone content of normal and cystic ovaries of swine. J. Anim. Sci. 8:640-641.
- Hazel, L. N. 1949. Problems, techniques, and experimental designs in animal investigations. Breed. and Genet. (Abs.) J. Anim. Sci. 8:610-611.
- Heitman, H. Jr., and Hughes, E. H. 1949. The effects of air temperature and relative humidity on the physiological well being of swine. J. Anim. Sci. 8:171-181. (ABA 17:947).
- Heitman, H. Jr., Hughes, E. H., and Kelly, C. F. 1949. The effects of some climatic factors on certain functions of swine. (Abs.) J. Anim. Sci. 8:641.
- Heitman, H. Jr., and Hughes, E. H. 1949. Hot weather effects on swine; controlled air temperatures and relative humidity aid in study of weight gains and well being of hogs. Calif. Agr. 3(11): 5, 12. (ABA 19:737).
- Henderson, C. R. 1949. Estimation of general, specific, and maternal combining abilities in crosses among inbred lines of swine. (Abs.) J. Anim. Sci. 8:606.

1949

- Herrick, J. B. 1949. Semen examination to determine fertility in swine. Vet. Med. 44:393. (ABA 19:1312).
- Herrick, J. B. 1949. What about artificial insemination in swine? Duroc News 23(8):42.
- Hiner, R. L. 1949. Standard method of cutting pork carcasses for determining the yield and percentage of wholesale cuts. Proc. 2nd Annu. Rec. Meat Conf. June 15-16, Chicago. 2:123-127.
- Holst, S. J. 1949. Sterility in boars. (Eng.) Nord. Vet. Med. 1:87-120. (ABA 17:1407).
- Johansson, I. 1949. Length of generation interval in Swedish farm animals. Eng. Sum. Sartryck Ur Kungl. Lantbruksakademiens Tidskrift Arg. 88:1949.
- Kopecky, O. 1949. The analysis of fertility in pigs from the physiological and genetic point of view. Eng. Sum. Sborn. Csl. Akad. Zemed. 21:358-379. (ABA 18:172).
- Kyle, W. H. 1949. The effect of successful embryo transplantations on the progress expected from selection. (Abs.) J. Anim. Sci. 8:607.
- Lowe, B. 1949. Organoleptic tests developed for measuring the palatability of meat. Proc. 2nd Annu. Rec. Meat Conf. June 15-16, Chicago. 2:111-116.
- *Lush, J. L. 1949. Heritability of quantitative characters in farm animals. Proc. 8th Internatl. Cong. Genet. Hereditas, Suppl. 1949. pp. 356-375. (ABA 17:1219).
- Lush, J. L. 1949. Reasonably possible rates of improving livestock by breeding. U. N. Scient. Conf. on Conserv. and Util. of Resources. E. Conf. 7(Sec) W. 212, 8 pp. (ABA 18:1233).
- Malpress, F. H. 1949. The use of hormones in animal husbandry. Chem. and Indus. 1949:99-104. (ABA 19:398).
- Maule, J. P. 1949. Pig husbandry in the British colonies. Brit. Agr. B. 2:377-382. (ABA 18:1019).
- McCarty, J. W. 1949. Breeding better pigs. S. Dak. Agr. Expt. Sta. 63rd Annu. Rpt. pp. 5-6.
- Mendel, T. 1949. Hamprace breed. West. Livestock Rptr. 33:6-7, 29.

1949

- Moore, B. H. 1949. Characteristics of substrates and media essential for metabolism and motility of ram, boar, and stallion spermatozoa. (Abs) Microfilm 9:12-13, (Abs.) Brit. Abs. A III 1950:430. (ABA 19:23).
- *Moxley, H. F., and McMillen, W. N. 1949. Four years of sow testing in Michigan. Mich. Agr. Expt. Sta. Q. B. 31(4):392-394. (ABA 18:1036).
- Muhrer, M. E. 1949. Hemostatic effects of normal blood transfusions in hemophilia-like swine. (Abs.) Fed. Amer. Socs. Expt. Biol. Fed. Proc. 8:231.
- *Musson, A. L. 1949. Slide rule for calculating the length of gestation. J. Anim. Sci. 8:470-471.
- Newland, H. W., Wolterink, L. F., Luecke, R. W., and McMillen, W. N. 1949. The thyroid activity of very young pigs as determined by the turnover of radioactive iodine. (Abs.) J. Anim. Sci. 8:643.
- Newton, R. C. 1949. Correlation of meat research in the meat packing industry and agricultural experiment stations. Proc. 2nd Annu. Rec. Meat Conf. June 15-16. Chicago. 2:84-88.
- Phillips, D. C. 1949. Prolapse of the rectum, bladder, vagina and uterus in a sow. Vet. Med. 44:358-359.
- Pullar, E. M. 1949. The rectal temperature in normal and infected pigs. Brit. Vet. J. 104:437-453.
- Rao, C. K., and Berry, R. O. 1949. The cytoplasmic drop and the cytoplasmic cap in the development of boar spermatozoa. Amer. J. Vet. Res. 10:357-360. (ABA 18:1040).
- Roberts, E., and Krider, J. L. 1949. Inheritance of red-eye in swine. J. Hered. 40:306. (ABA 18:628).
- Rottensten, K. 1949. Progeny testing stations and livestock improvement. The conservation and utilization of resources. U. N. Sci. Conf. Apr. 26, 1949. Land Resources 11(a) Livestock Breeding.

1949

- Roubicek, C. B. 1949. An analysis of the breeding methods employed in the development of the Minnesota No. 2 herd of swine at the Minnesota Northeast Experiment Station. Ph.D. Thesis. U. Minn. Libr. St. Paul.
- Shrode, R. R. 1949. Three-week and eight-week weights of litters as bases for predicting future productivity of sows. Ph.D. Thesis. Iowa State Col. Libr. Ames.
- Squiers, C. D. 1949. Factors influencing fertility of sows. Third Annu. Livestock Day, U. Mo. Oct. 28, 1949. pp. 6-7.
- Squiers, C. D., Hauser, E. R., Dickerson, G. E., and Mayer, D. T. 1949. Inbreeding and strain influences on components of fertility in sows. (Abs.) J. Anim. Sci. 8:644-645.
- Tanabe, T. Y., Warnick, A. C., Casida, L. E., and Grummer, R. H. 1949. The effects of gonadotrophins administered to sows and gilts during different stages of the estrual cycle. J. Anim. Sci. 8:550-557. (ABA 18:177).
- Thomas, L. E., and Mayer, D. T. 1949. The proteins of mammalian spermatozoa and cellular nuclei. Science 110:393-394. (ABA 18:24).
- Torres, J. R., and Coco, V. 1949. A case of pseudo-hermaphroditism in swine. Eng. Sum. Rev. Ceres 8:96-98.
- Tullis, J. L. 1949. Radioresistant cells in certain radiosensitive tissues of swine exposed to atomic bomb radiation. Arch. Path. 48:171-177.
- Ulberg, L. C., Grummer, R. H., and Casida, L. E. 1949. The effects of progesterone upon ovarian function in gilts. (Abs.) J. Anim. Sci. 8:646.
- Wallace, C. 1949. The effects of castration and stilboestrol treatment on the semen production of the boar. J. Endocrinol. 6:205-217. (ABA 18:632).
- Warnick, A. C., Grummer, R. H., and Casida, L. E. 1949. The nature of reproductive failures in repeat-breeder sows. J. Anim. Sci. 8:569-577. (ABA 18:178).

1949

- Warnick, A. C., Wiggins, E. L., Casida, L. E., Grummer, R. H., and Chapman, A. B. 1949. The age of puberty in a herd of inbred swine. (Abs.) J. Anim. Sci. 8:646.
- Warwick, E. J., and Wiley, J. R. 1949. Growth rates of some inbred, purebred, crossbred, and crossline pigs. (Abs.) J. Anim. Sci. 8:610.
- Warwick, E. J., and Wiley, J. R. 1949. Progress report on the development of inbred lines in swine and their uses in crosses. Purdue U. Agr. Expt. Sta. Cir. 362.
- Whatley, J. A., Jr. 1949. Breeding livestock for more efficient production. Okla. Agr. Expt. Sta. MP-15:25-32. (ABA 18:465).
- Wiggins, E. L., Grummer, R. H., and Casida, L. E. 1949. Minimal number of sperm for fertility in artificial insemination of swine. (Abs.) J. Anim. Sci. 8:647.
- Willman, J. P., Asdell, S. A., and Loosli, J. K. 1949. The value of thiouracil in rations for growing and fattening pigs. J. Anim. Sci. 8:191-198. (ABA 17:964).
- Wilson, R. F. 1949. A study of reduced fertility in female swine. Ph.D. Thesis. U. Ill. Libr. Urbana.
- Wilson, R. F., Nalbandov, A. V., and Krider, J. L. 1949. The reproductive performance of two selected lines of Hampshires. (Abs.) J. Anim. Sci. 8:647.
- Wilson, R. F., Nalbandov, A. V., and Krider, J. L. 1949. A study of impaired fertility in female swine. J. Anim. Sci. 8:558-568. (ABA 18:179).
- Winters, L. M. 1949. Scientific processes for the improvement of farm animals. The Sci. Monthly. 69(3). Sept. pp. 197-200.
- Winters, L. M. 1949. The Minnesota strains of swine. Farming (Norwich) 3:71-75.
- *Winters, L. M. 1949. Cruzamiento porcino en Estados Unidos. Rev. Pecuaria 111: 16-17.
- Winters, L. M., Sierk, C. F., and Cummings, J. N. 1949. The effect of plane of nutrition on the economy of production and carcass quality of swine. J. Anim. Sci. 8:132-140. (ABA 17:965).

1949

Yang, Feng. 1949. Factors affecting litter size in swine. M.S. Thesis, Iowa State Col. Libr. Ames.

Zeller, J. H. 1949. Better type hog achieved by U.S.D.A. breeding study. Natl. Prov. 121(14):124-126, 128-129.

Zeller, J. H. 1949. Use of Danish Landrace in development of improved strains of hogs. (Abs.) Proc. Assoc. So. Agr. Workers Conv. 46:71.

Zeller, J. H. 1949. Breeds of swine. Farmer & Dairyman 41:37.

Zeller, J. H. 1949. Bigger yields of the better cuts of pork. Meat 31(5):173-174. Also Butchers' Advocate 126(17):8-9, 19.

Zeller, J. H. 1949. Use of Danish Landrace in development of improved strains of hogs. Tex. Livestock J. 8(10):75.

